Code **501147**

AXMINSTER
INDUSTRIAL SERIES

D405A/3 3200
Panel Saw

AXMINSTER 3 THREE YEAR GUARANTEE

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1. GENERAL INFORMATION & SAFETY RULES

- OAV equipment & tools, inc. is specialized to supply full series of panel saw from 1600, 2300, 2500, 3200 to 3800mm. The outlook design of this machine is so unique, complete cast iron trunnion bracket instead of sheet metal, enlarged outrigger and carriage, direct dust collection outlet. Term its overall condition. The table saw is also an important product after our band saw series, please enjoy your operation on this machine and if you have any comment to improve this saw, please don't hesitate to contact us through your agent.
- The panel saw are professional for woodworking machine designed to rip solid wood, chipboard, fiberboard, plywood and so these materials. Be careful for rigidity of working materials; don't try forbidden materials such as low flash point metals and high stiff stone…etc.

  HSS (High Speed Steel) saw blade and milling tools should not be used. The saw blade made in accordance with EN847-1: 1997 shall be used on the machine.

  Generally speaking, this machine will be installed as the following conditions:

  1) Supply voltage: 0.9 - 1.1 normal supply voltage
  2) Source frequency : 0.99 - 1.01 normal frequency
  3) Ambient temperature: 5°C - 40°C.
  4) Altitude: shall be at altitudes up to 1000m above the middle sea level.
  5) Relative humidity: not exceed 50% at 40°C.
  6) Atmosphere: Free from excessive dust, acid fume, corrosive gases and salt.
  7) Avoid exposing to direct sunlight or heat rays which can change the environmental temp.
  8) Avoid exposing to abnormal vibration.
  9) Electrical equipment shall withstand the effects of transportation and storage temperature within a range of -25°C to 55°C. Then, for short periods, it does not exceed 24 hours at up to +70°C.
- This machine was designed for certain applications only. We strongly recommend that this machine **NOT** be modified and/or used for any application which for other than its design. If you have any question which is relative to its application, **DO NOT** use the machine until you have had detail instruction from your dealer.

Safety Rules

For your own safety read instruction manual before operating

1) **Read instruction manual before operating the machine for your safety.**
   People who operate the machine must be trained, read and understood to use the safety measures, possess the ability to obey, and execute the regulation stated in this manual. Learn the machine's application and limitations as well as the specific hazards peculiar to it.
2) **Ground all machines.**
   It should make sure the "PE" terminal being connection before machine operating.
3) **Keep guards in place and working area clean.**
   Keep guards in place and in working order.
4) **Don't use in dangerous environment.**
   Don't use machines in damp or wet locations, or expose them to rain.
   Please provide a suitable illumination around the machine for safety operation.
5) **Keep children and visitors away.**
   All children and visitors should be kept in a safe distance from working area.
6) **Store idle tools (cutting spindle).**
   When not in usage, tools should be stored in a dry, high or locked up place, out of reach for children.
7) **Wear proper apparel.**
   No loose clothing, glove neckties, rings bracelets, or other jewelry to get caught in moving parts. Wear protective hair covering to contain long hair.
   Please wear glove to take/ replace saw blade and wear eye-shield/ ear-shield to operation.
8) **Stay alert.**
   Watch what you are doing. Do not operate machine when you are tired.
9) **Don't force machines.**
   It will do the job better and be safer at the rate for which it was designed.
10) **SHUT OFF** the power, removed the products, and isolated energy before leaving the machine.
    Shut off the power and carried out only when the machine is stationary before inspection, maintenance, adjustment and cleaning.
11) **No smoking!!** Don’t smoking while operate machine.

12) **Have your machine repaired by a qualified person.**
Repairs should be carried out by qualified-persons using original spare parts; otherwise this may result in considerable danger to the user.

13) **Check damaged parts.**
Before further use of the machine, a guard or other part that is damaged should be carefully checked to determine what it will operate properly and perform its intended function. Being check for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced

14) **Disposing of wasted material**
Disposing wasted material and wasted lubricating oil shall obey the local regulation and be deeply careful.

15) **Fire extinguisher:**
Workshop of user shall be with the fire extinguisher or other devices according to the local safety regulations and be deeply careful.

16) **Stand on proper position for operation.**
Please stand in front of machine for operation. Please refer to the following drawing.

17) **Use recommended ancillary equipment.**
Consult of the instruction manual of drawing for recommended accessories.
The use of improper accessories may cause risk of injury to persons.
If ancillary equipment is removed the original guards or safety devices shall be replaced.
OAV and our authorized agency are responsible for a future connection of the machine with ancillary equipment only if we ourselves have designed such connection.

18) **Reduce the risk of unintentional starting.**
Make sure switches of control panel are OFF position before operating.

19) **Never leave machine running unattended.** Turn power off from the hand-held disconnecting device. Don't leave machine until it comes to a complete stop.

20) **Make sure machine is disconnected from power supply:**
Make sure machine is disconnected from power supply before started the normal maintenance and service, adjustment, or repairing.

21) **Reaction with emergency situation:**
This machine provides two emergency buttons. One is self-latching push-button on the control panel of access position. Other emergency buttons are position on the front side on the machine near in-feed working area. The emergency button is colored red and yellow background. After emergency stop, follow the normal start up procedure and suitable operation to obviate the hazard. Please see the afterward pages of emergency stop position diagram.

22) Never open the protective cover or the machine door while the machine is running.

23) When the machine is out of order while running, shut it down and to call servicemen for help as soon as possible.

24) Wear ear protectors (plugs or muffs) during extended periods of operation.

25) Remove adjusting keys and wrenches before turning machine on. Be sure that the keys and adjusting wrenches have been removed and all the nuts and bolts are secured.

26) After switching off the saw motor, allow the saw blade to stop freely. Never attempt to stop the cutting by hand or other objects.

27) Never cut the wood plate if there is no completed width or too small.

28) The max. Rotation speed marked on the saw blade must not be exceeded.

29) The machine shall be not loaded with more than work piece at a time.

30) During making wooden cases, it will emit harmful dust. User must install exhaust system for the extraction of harmful dust.

31) Use correctly sharpened saw blades. Observe the max. Speed marked on the saw blade. User shall be to select the optimum speed for saw blade.

32) Report faults on the machine, including guards or saw blades, as soon as they are discovered.

33) Adopt safe procedures for cleaning, maintenance and remove chips and dust regularly to avoid the risk of fire.

34) Follow manufacturer’s instructions for operating, adjustment and repair of saw blades.

35) Ensure that any spacers and spindle rings used are suitable for the purpose as stated by the manufacturer.

36) Refrain from removing any off-cut or other part of the work piece from the cutting area whilst the machine is running.

37) Ensure that guards and other safety devices necessary for machine operation are in position, in good working order and properly maintained.

38) Safety working practice.

a) Use of push block and push stick- Push stick should be used to avoid working with hands close to the saw blade. Push blocks should be between 300mm and 400mm long, 80mm to 100mm wide and 15mm to 20mm deep. Push blocks should be used when cutting small work pieces and in circumstances where it is necessary to push the work piece against the fence.

b) Selection of saw blade and riving knife- the operator should only select saw blade of a diameter and thickness suitable for the machine.

c) Selection of riving knife slot- The riving knife guiding slot should be no more than 0.5mm wider than the riving knife guiding elements.

d) Fixing of saw blade to spindle- Where the spindle diameter is less than the saw blade bore diameter, flanged bushes provided by the machine manufacture should be used to make up the difference. The use of loose rings or bushes is not permitted.

e) Lighting- it is important to provide adequate lighting around the machine.

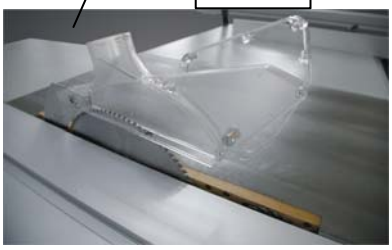
39) Guide the work piece along the rip fence and through the rotation saw blade, using the push stick if necessary. Any damage, please replace new one that specification according below drawing.

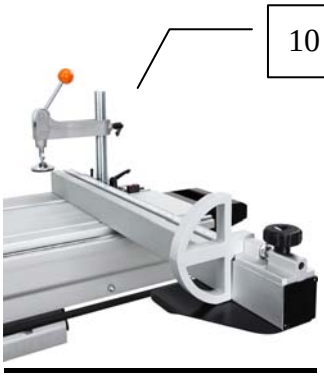
40) Do not operate this machine while tired or under the influence of drugs, alcohol or any medication.

41) **The dust generated by certain woods products can be injurious to your health.** Always operate machinery in well-ventilated areas, and provide for proper dust removal. Use wood dust collection systems whenever possible

42) Any other maintenance is welcome to be contacted manufacturer or our distributor.

D405A/D405M/D405





Main features

1. MACHINE BODY
2. SLIDING TABLE
3. EDGE SHOE
4. MOTORIZED RIP FENCE (OPTIONAL)
5. CONTROL PANEL (OPTIONAL)
6. OVERHEAD GUARD(OPTIONAL)

6-1. ONE PIECE STANDARD GUARD

7. CROSSCUT FENCE
8. FLIP STOPS
9. CROSSCUT FRAME
10. HOLD DOWN WITH MITER FENCE (OPTIONAL)
11. Control Panel (with angle read-out)

SPECIFICATIONS

ITEM	MODEL D405A
Sliding table dimension	3200x395mm
Cast Iron table	548x896mm
Extension table (rear)	952x896mm
Extension table (front)	830X320mm
Table size	1500x1725mm
Round rail	φ50mm
Main saw blade /Optional	φ 355 (14")/Max. 400 (16")
Main saw bore	φ30mm
Max. cutting height at 90° (355mm)	105
Max. cutting height at 45° (355mm)	70
Main motor power (3ph)	7.5 HP (5.6 KW)
Main blade speed	3000/4000/5000rpm
Scoring saw blade	φ 120
Scoring saw blade bore	φ20mm
Scoring blade motor power	1 HP (0.75kw)
Scoring blade speed	8000 rpm
Cuting width	1300mm
Cuting width adjustment	Manual
Main saw blade tilting adjustment	Motorized (0° ~ 45°)
Main saw height adjustment	Motorized
Scoring saw adjustment	Manual
Motorized rip fence	Optional
Dust collection system	120/75mm
N.W./G.W./MEAS.: (Machine)	670/770kgs (2105x1150x1120mm)/94'
N.W./G.W./MEAS.: (sliding table)	150/196kgs (3475x490x365mm-sliding)/22'
N.W./G.W./MEAS.: (overhead guard)	34/36 kgs (3 cartons)
N.W./G.W./MEAS.: (motorized rip fence)	2040x575x360mm, 83/106kgs /15'
Ctn QTY (with overhead guard)	7/17sets

Due to needs of continuous improvement, specification are subject to change without prior notice

3-1. UNPACKING

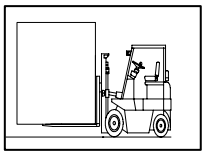
SETUP SAFETY

– For offering the completed information regarding to the operation and maintenance of our OAV machine, the operator are sure to protect the production as well as the equipments.

– Our sales organization is always at your disosal for any technical problem (reparation, spare part delivery.),and to help your business.

– Keep this handbook for future information besides it shall always be with the machine. And follow the instruction of this handbook is very important .

– Provide for adequate space surrounding work area and around the machine clean and free of scrap material,oil and grease.



– The Model D405 series is a heavy-duty machine. **For equipments when unpack .**

– The sliding table for the machine weighs over 160kgs. **Use at least four strong people to lift it in position**. Improper lifting techniques or inadequate lifting assistance could result in serious crushing or strain injuries.

– Place a level on the saw table and adjusting 4 screws when necessary , so the saw table is level from left to right and from front to back.

◎IMPORTATNT!! REMOVE THE FIXING PLATE(A,B) FROM D405 BEFORE OPERAT

3-2. CHECK MACHINE ITEM

D401/D405 Packing List

* Machine body one unit -1 wooden crate
* Sliding Table one unit -1 wooden crate
* Assembly parts for crosscut fence. x1
* Assembly parts for crosscut table. x1
* Assembly parts for swing tube. x1
* Assembly parts for rip fence x1
* Assembly parts for tool box x1+ instruction manual x1 +guard x1 + Flip stop x 2-
* Assembly parts for rear extension table. x1
* Assembly parts for left extentsion table x 1
* Assembly parts for edge shoe x1
* Assembly parts for scale x 1
* Assembly parts for round bar x 1

Optional parts

* Assembly parts for overhead saw balde guard A1 type x 1 (5 packages)

3-3. FITTING THE SLIDING TABLE

Fitting the parts demounted for transport reason. For packing and transport reasons, some machine members are removed.

◎ All fitting operations require approx. 4 people

The accessories bag contains hex head bolts for fixing the sliding table
– Reset the sliding table complete with rail on the machine frame
– To lock the rail with the machine frame, screw down into the threaded hole
– Push the sliding table up against the stop screws prior to be tighten(fig. 3-3.1)

◎ Working table is adjusted and fixed before shipment. When assebmle, suggest to attach directly without to re-adjust again.

If demanded, please unscrew nuts A(fig 3-3.2) to ajust working table position. And check the position by the right angle ruler.

fig 3-3.1

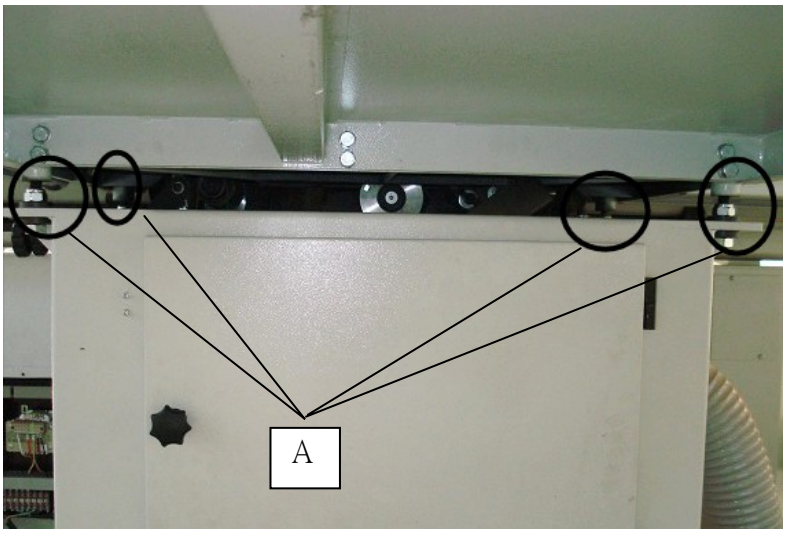


fig 3-3.2

3-4. FITTING CROSSSUT TABLE & CROSSCUT FENCE

◎ All fitting and demounting operations require**at least 2 people**

Fitting the crosscut support

- Fit pivot "A" (fig 3-4.1) into the end of pivoting arm "B" (fig 3-4.1） first
- direct attach crosscut frame "C" (fig 3-4.1） to the sliding table through the the groove " D" (fig3-4. of the sliding table, (3-4.1) tighten lever "E" to fix on the sliding table (fig 3-4.1).

Note : To remove the crosscut frame, by withdraw E (fig 3-4.1).

Fitting the crosscut table & fence

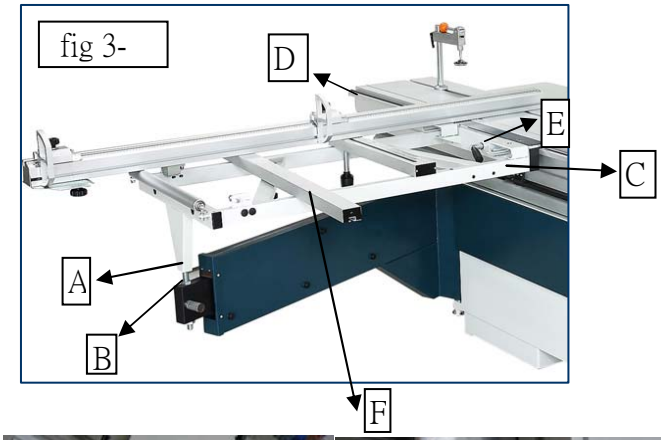
- Fit groove " F " (fig 3-4.1) to the holes (fig 3-4.1) of crosscut frame.
- Insert the fix block and set screw to the cross cut fence first then match the position " J" " H" " K" Put the crosscut fence on the cross cut fence on the crosscut table.

Parallel the crosscut fence and table, tighten the Screw knob to fix it. (fig. 3-4.2)

Fitting the flip stop units

- Unlocking knob " N" (fig 3-4.3) of the extension piece and
- Put the flip stop unit to groove "O" (fig 3-4.3) of crosscut fence.

NOTE : For D405, Position " K" to adjust to parallel the table.



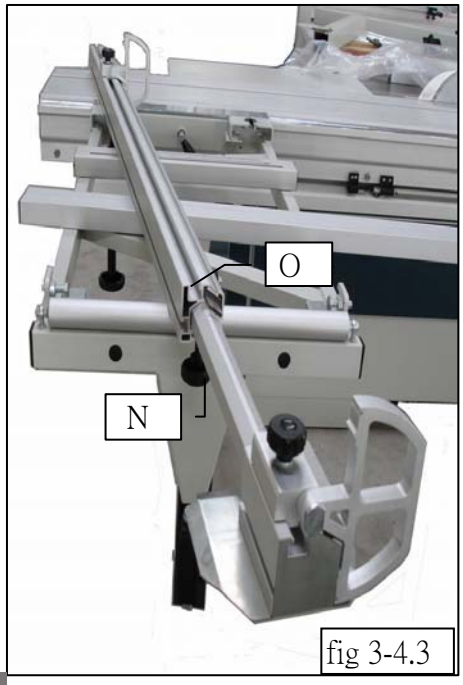
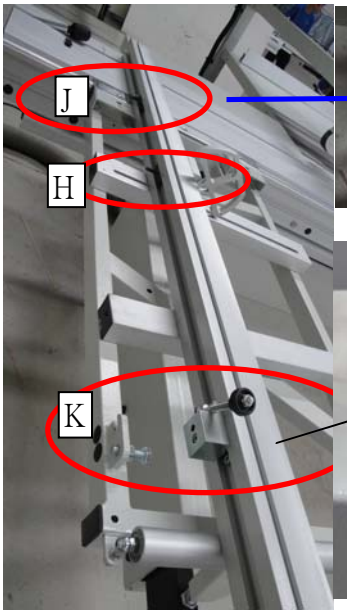


fig 3-4.3



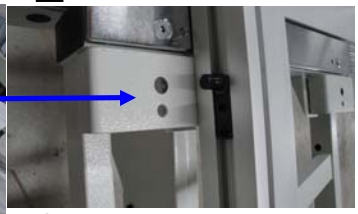


fig.3-4.2

3-5. FITTING THE EXTENSION TABLE

EXTENSION TABLE

◎ All fitting and demounting operations require 2 people

- Position the extention table over the holes on the cast iron table with the screws, before fasten the screw check the extension table and keep it aligned with working table (check the alignment with a ruler or straight edge placed on the tables)
- Screw down the three screw A(fig 3-5.1)
- Adjust the alignment with grub screws B when is needed. (fig 3-5.1)

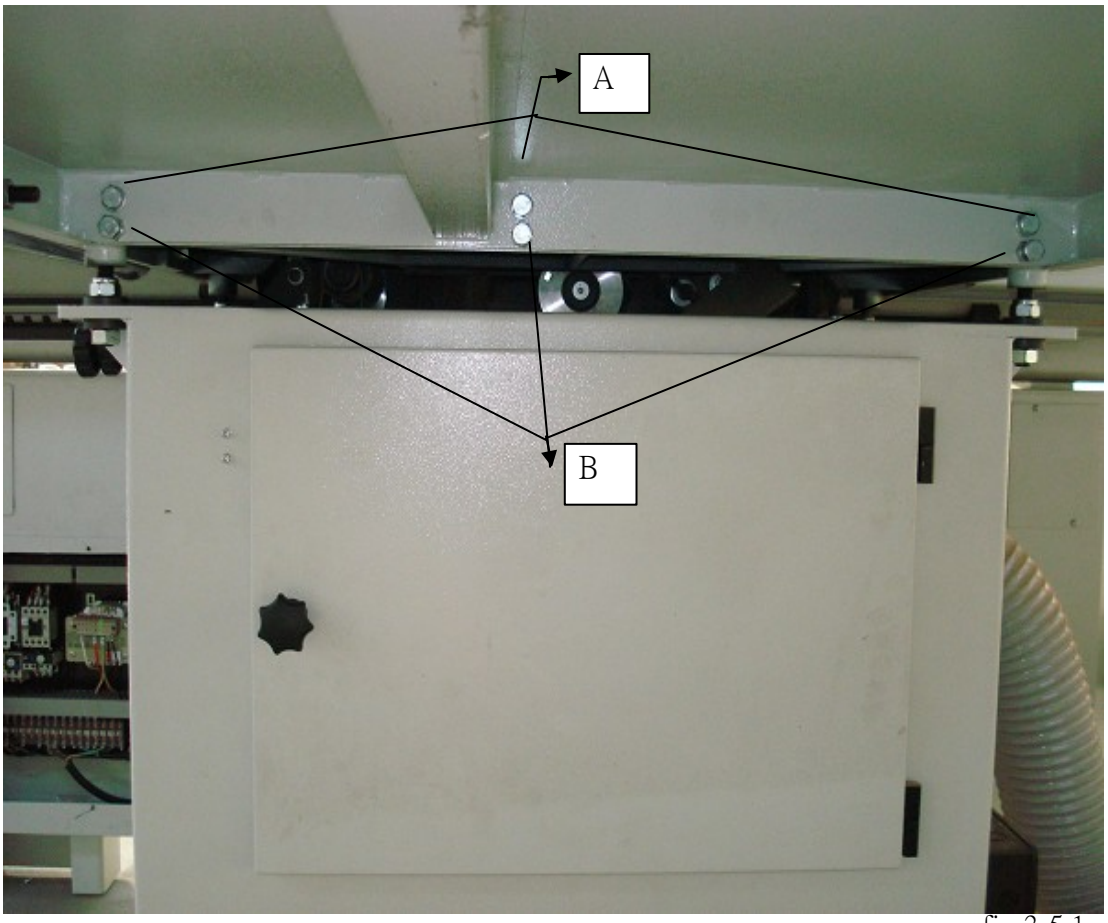
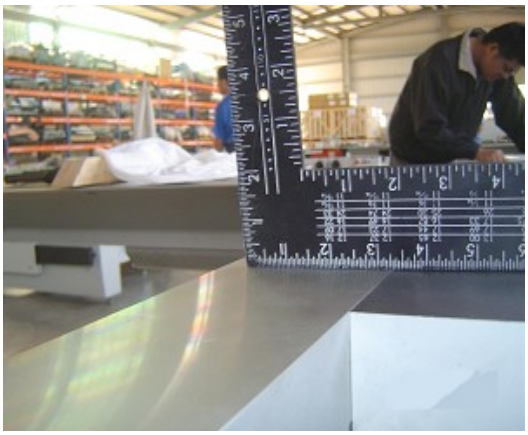


fig 3-5.1



3-6-2.1 OVERHEAD SAW BLADE GUARD & CONTROL PANEL

1.When the max saw blade dia. More 355mm, the overhead saw blade guard is necessary to follow the CE regulation. The saw is offered with wide hood for tilting cutting.

Fig3..6.2.1

2. install the overhead safety guard. The blade guard assembly consists of 2 parts, one support arm and 2pcs of clear plastic blade guard shield. (one flat shield and one wide shield for tilting cutting).

3.Position the support arm over the holes on the side of machines and secure it within the nuts M20x3pcs and lock washers.(Fig3.6.2.1)

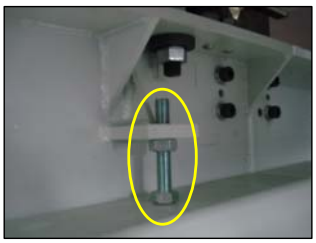


Fig3.6.2.2

4. (fig.3.6.2.3)Assembled the support bracket arm with screw not yet fasten it install the fix plate between the support bracket and the table (fig. 3.6.2.4) parallel it then fasten it. If is not in the right position, adjust the bolt to the right position (3.6.2.2).

5. Insert the long support bracket through the arm (fig. 3.5.2.5) overhead saw blade guard. (Fig3.5.2.5)

fig.3.6.2.4

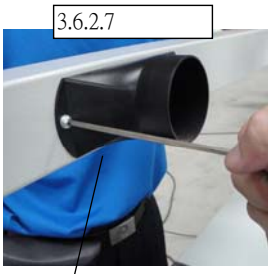
fig. 3.6.2.5

fig.3.6.2.3

6 Use 3pcs of head screw M6 to assemble the fixed plate for Install adaptor to the the hose to the saw blade guard.(Fig3.6.2.6 & 3.6.2.7)

Fig3.6.2.6

3.6.2.7



7. Install the control panel support arm to the support bracket fasten it with (fig. 3.6.2.8)

Fig. 3.6.2.8

3-7. FITTING RIP FENCE

◎ **All fitting and demounting operations require 2 people**

Remove the washer and nut from the round bar first and then

–Insert the screw rod of the round bar into the holes A fig 3-7.1) of working table extension table put the washer and nut at the back side of the table , then fasten it in the right position.

– Mount the fence scale (ruler) set to the edge of the working table and extension table B(fig 3-7.1) fasten the fence scale (ruler) set with washer and lock washer.

– Slide rip fence support C(fig 3-7.1)into round bar D(fig 3-7.1)
– Handle E (fig 3-7.1) Up to release rip fence , down to lock the rip fence.
– Mounting aluminum fence F (fig 3-7.1) to clamping assembly in upward position.

NOTE : Before operation, the 0 mark on the rip fence scale must be aligned wth the right side of the blade to ensure the processing accurate . And release the screw to adjust the scale position.

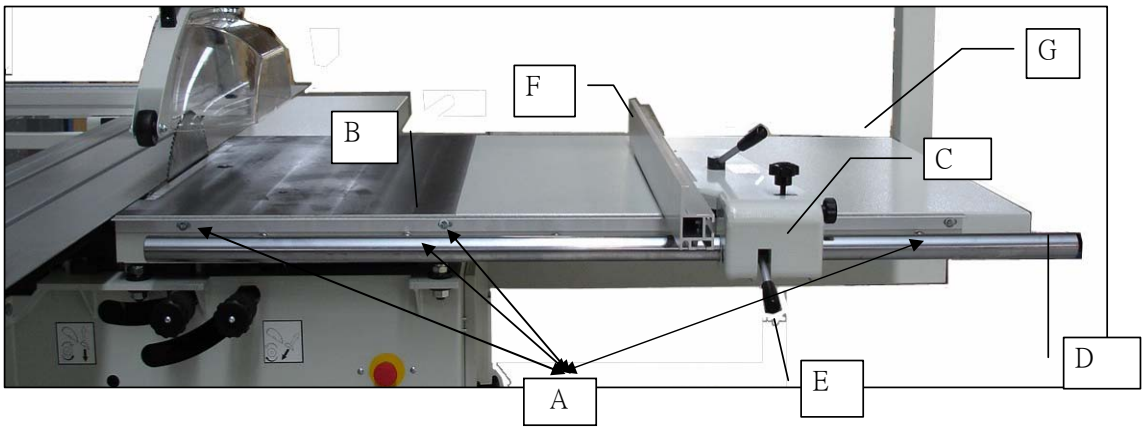


fig 3-7.1

3.8 FITTING MOTORIZED RIP FENCE

(1.) Motorized rip fence(Fig.3.8-1)(Fig.3.8-2) Firstly, remove the nut and washer from the linger guide Position the Motorized rip fence liner guide unit A in the location holes along the working table and and the extension table , parallel it with table then fasten it . Before that fasten it. Note—The center mounting post is positioned closer to one end of the rail. Align the mounting posts with the mounting holes accordingly. Use the straight edge to check the alignment of the table.

(2). Insert the pin to the rip fence set see " B" , assemble the fence body to the rip fence set Use screw to fasten the rip fence and put the lead to cover the hole, to prevent the dust . (Fig.3.8-3 & 3.8-4 & 3.8-5)

fig. 3.8-1

fig. 3..7.2-2

fig. 3.8-3

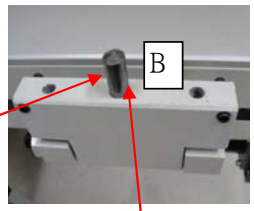


fig. 3.8-4

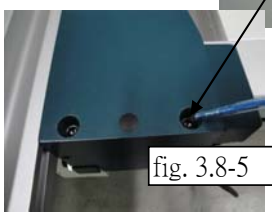
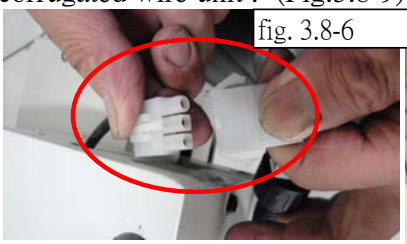


fig. 3.8-5

(3). (Fig.3.8-6)Connect the wiring of Push-botton Switch at the right side of the rip fence put mount the cover back when finish (Fig.3.8-7)

(4).Install the wire set on the machine bodyfig. 3.8-8, connect the Motorized rip fence corrugated wire unit . (Fig.3.8-9)

fig. 3.8-6



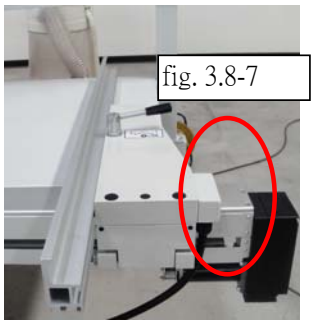


fig. 3.8-7

fig. 3.8-8

fig. 3.8-9

Notice for Motorized Rip Fence when new machine assembled

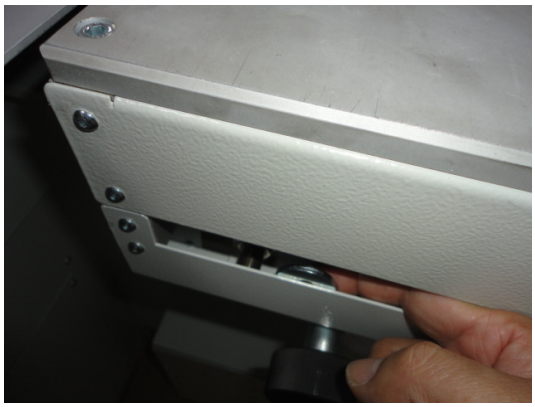
Question: The fence works perfectly when you ask it to go from a small dimension to a larger one but when you ask it to go from a larger number to a smaller one the fence will not move until you hold down the start button.

The reason： New machine or recently-used or a sudden power failure from lack of use of safety has been eliminated from the memory arising.

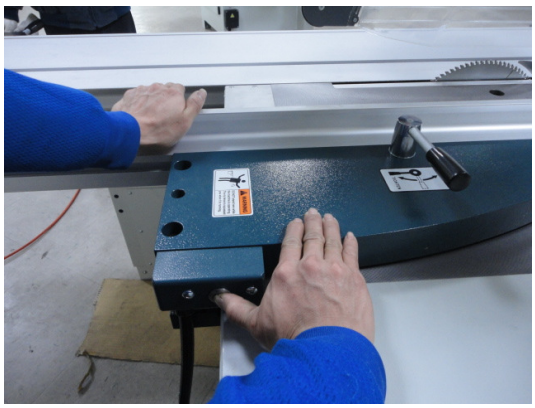
Solution: Front and rear limit switch contacts to complete a safety distance from the reading of Motorized Rip Fence regulations set

Practice: Use A OR B function can be set.

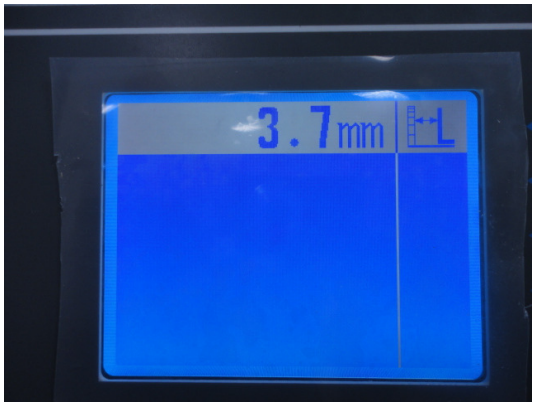
A. Use a washer (iron) to touch the fence of front and rear limit switch.



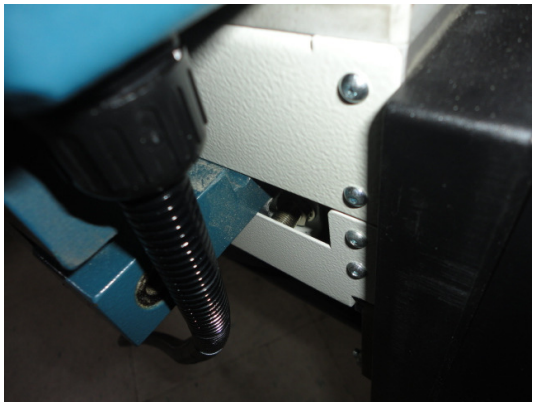
B. Press and hold the brake release button and push forward to reach the front limit switch.



When touch the front limit switch the screen will be highlight.



Press and hold the brake release button and pull back to touch the rear limit switch.



When touch the rear limit switch the screen will be highlight.

After touch the front and the rear limit switch press and hold the brake release button and push forward to the middle position to finish.

3-9. FITTING THE SAW BLADE

Safety notes

◎ Install the saw blade with gloves, always pay attention when changing the blade.

◎ Open blade protect guard before install the saw blade (fig3-9.2a).

For fitting or replacing the saw blade proceed as follows:

–Adjust the main saw blade unit in 90 degree by turning handwheel A(fig3-9.1).

– Rise up the main saw blade by turning knob B (fig 3-9.1) clocwise

– Press the emergency button

– Move the sliding table totally to the right

–Open the blade protect guard -red cover (fig 3-9.2)

– With thumb press the button for locking the spindle through hole F(fig 3-9.3) and at the same time turn the saw spindle in order to lock it.

– By turning the proper wrench clockwise totally unscrew screw G(fig 3-9.3)and washer H(fig 3-9.3) which clamps the saw blade.

Note : Continue to press the button until the screw is loosen.

– Before fitting the saw blade, make sure that the flange H(fig 3-9.3) is clean to avoid vibrations when the saw blade is rotating

– Fit washer H(fig 3-9.3) ,screw G(fig 3-9.3)

– Tighten screw G(fig 3-9.3) by turning the screw counter clockwise

◎ During the machine operation, pay attention to the saw unit.

Pay attnetion when the blade guard is open , always close it and make sure no one around before you move back your sliding table.

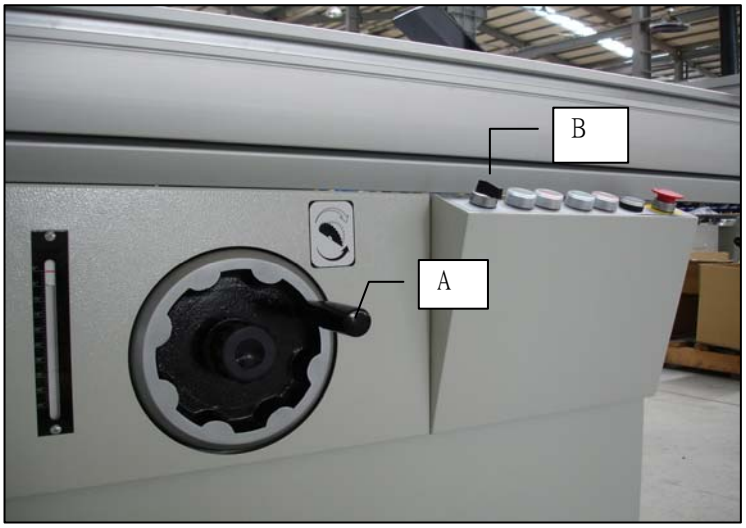


fig 3-9.1

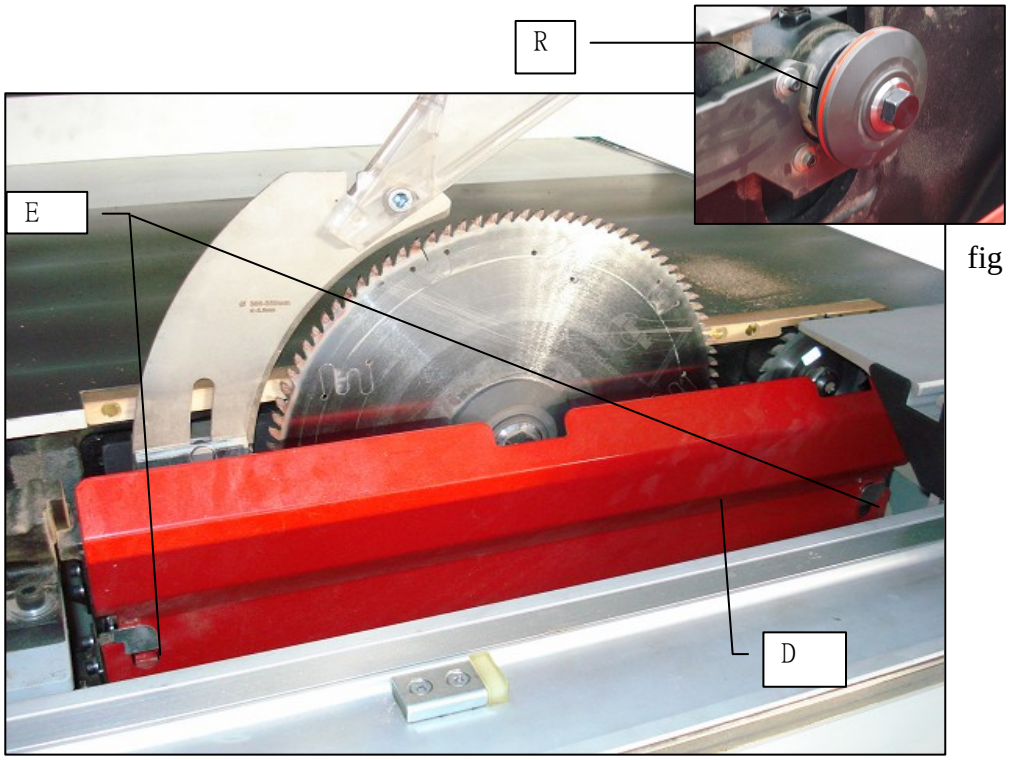


fig 3-9.2a

fig 3-9.2

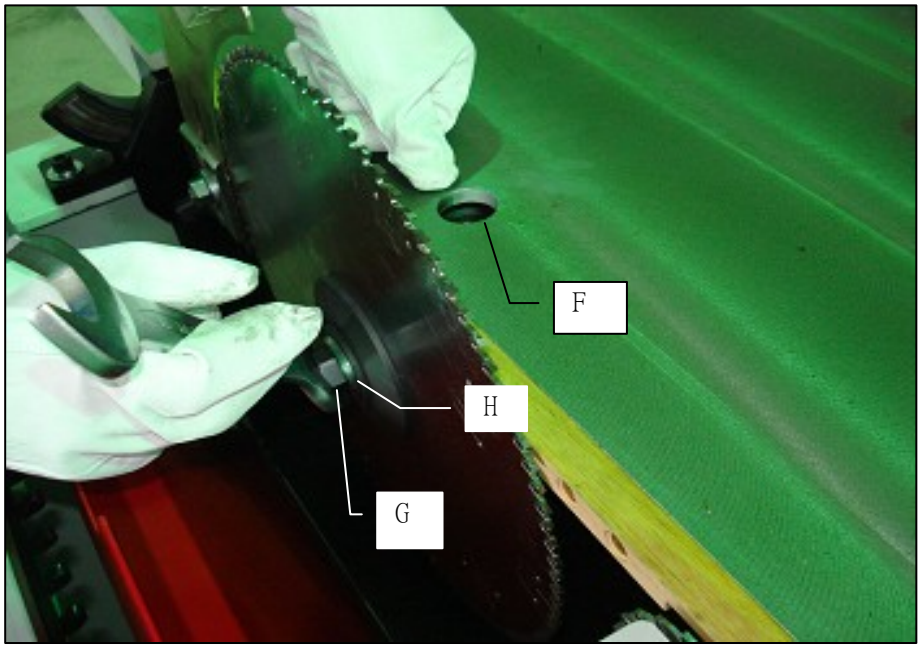


fig 3-9.3

3-10. RIVING KNIFE

◎ Install the riving knife with gloves.

NOTE : The machine is always equipped with one riving knife for 355mm saw blade

◎Always fit the proper riving knife

– Loosen nut A(fig 3-10.1) insert the riving knife with a wrench without complete tightenging it.
– Position the riving knife about 3mm or 1/8" away from the nearest tooth on the main blade.
(gap L between saw blade and riving knife shall be 3mm approx.)
–Tighten the nut A to scrure the riving knife in the position. (fig 3-10.1)
– Move the blade guard back to the postion, move the sliding table to center.

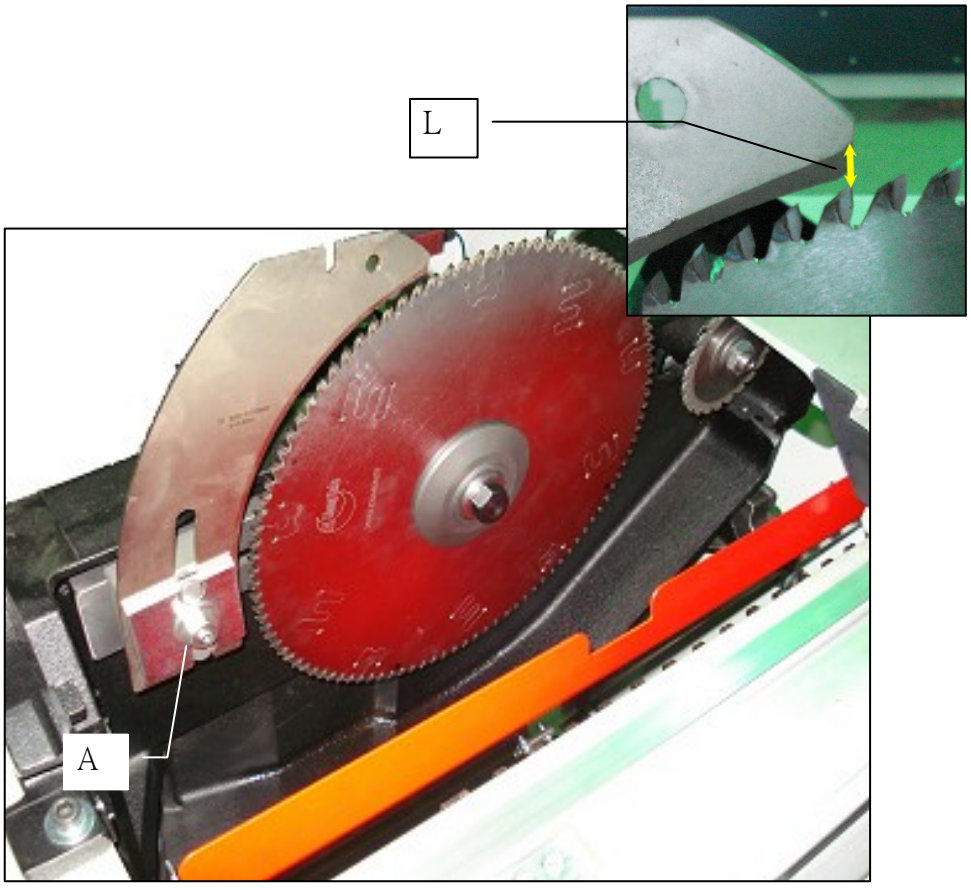


fig 3-10.1a

fig 3-10.1

3-11. Changing scoring blade

◎ Changing scoring blade with gloves, always pay attention when changing the blade.

– Press the emergency button
– Set the saw blade in 90 degree by turning the handwheel A (fig. 3-11.1)
– Loosen knob B (fig 3-11.1), turning knob A(fig 3-11.1) clocwise to set the sawblade upward
– Lock knob B (fig 3-11.1)
– Move the sliding table totally to the left
–Open the blade protect guard -red cover (fig 3-11.2)
– Hold the spindle in a fix positon by inserting the fixing bar E(fig 3-11.3)
– Loosen nut with hex- wrench
– Take off nut and one flange
– Make sure that flanges and scorer blade are clean
– Fit the scoring blade, flange and nut then tighten nut E
–Move the fixing bar from Table
– Release the emergency button

NOTE : for safety concern, always close the blade guard when finished, (fig. 3-11.2);
move back the sliding table to the center.

◎ During the machine operation, pay attention to the saw unit &
when the blade guard is open , always closed the guard when is finised , make sure no people around before you move back your sliding table.

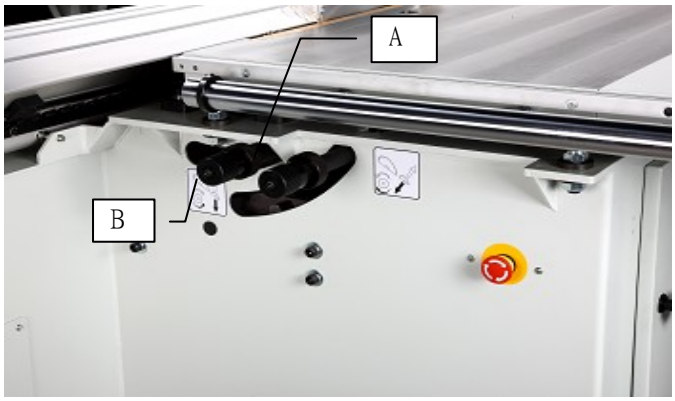


fig 3-11.1

fig 3-11.2a

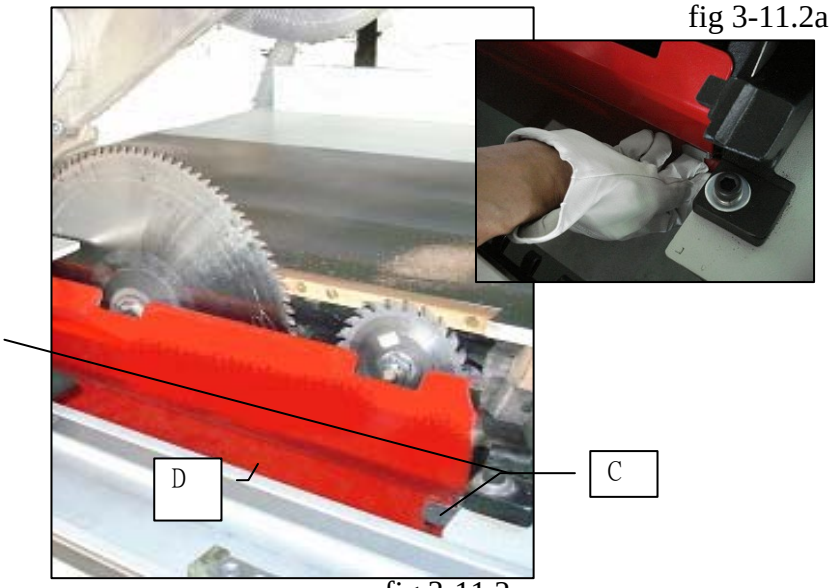


fig 3-11.2

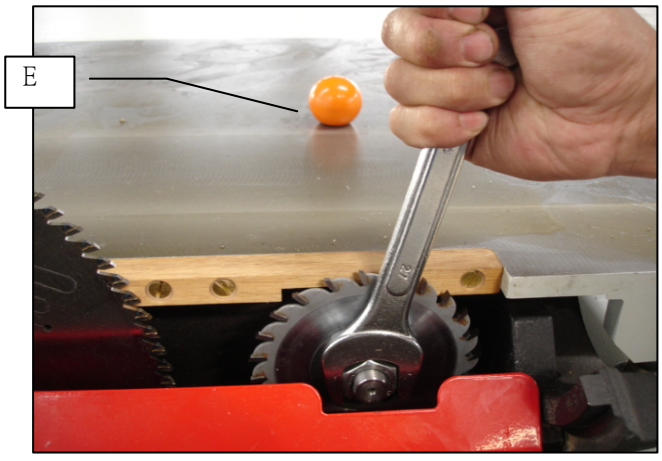


fig 3-11.3

3-12. EDGE SHOE ,HOLD DOWN & MITER FENCE

Edge shoe
– The edge shoe is used for trimming planks and fixes the workpiece on the sliding table.

NOTE : Edge shoe is demanded in heavy duty processing.

fig 3-12.1

Miter Fence with hold down(Optional)
– Allows precise miter cuts between + 45° and - 45° on the sliding table and clamping the workpiece.

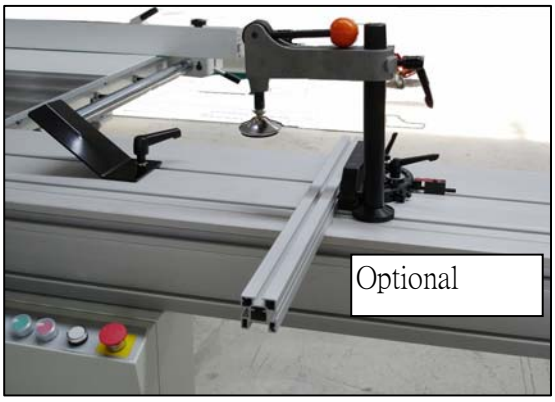


fig 3-12.2

3-13. CONNECTION TO THE DUST COLLECTION

◎ **The connection to the dust collection is necessary for the good machine operation. Always work with the dust collector in operation.**

The saw is equipped with two dust ports connected to a dust collection system before operation.

–Exhaust pipe (fig 3-13.1) diameter 120mm
–Exhaust pipe (fig 3-13.2) diameter 75mm. Make sure the exhaust pipe well placed along overhead guard arm.

If other machines are connected to the centralized collection system, carry out a test with all collection system in operation.

The right operation of the collection system reduces the risks of dust inhalation.

fig 3-13.1

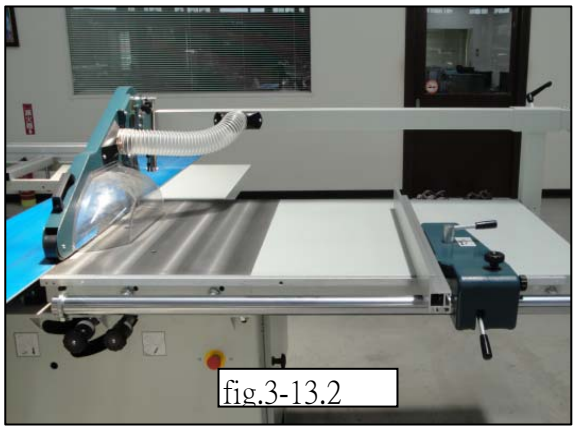


fig.3-13.2

3-14. WIRING & TEST RUN

–Make sure that the electric system of the workshop may absorb the machine power and that the grounding system agrees with the prescriptions in force.

NOTE : Comply with local codes to prevent fire accident.

– The power cord section need to fit motor power rating

– Please **CUT OFF** power source before open the terminal box for the electrical connection. The connection terminals for the supply cables are marked with L1, L2, L3, N and PE.

– Make sure all electrical circuits are grounded before you connect them to the machine.

– If the motor wrong rotary, the power source is connected to the reverse phase. Please change the incoming wire L2 and L3.

fig 3-14.1

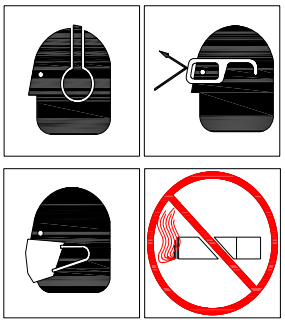
– Test run :

◎ **Make sure safety device. Machine operator is to be trained for the use, adjust, and operation.**

– All operations requiring the demounting of machine components must be carried out only by suitable skilled and authorized personnel.
Keep the safety prescriptions as well as the general work safety regulations.

– If any problems happen, press the emergency STOP button. If you need help, please take the troubleshooting section of this manual or contact your local agent.

– Always wear safety glasses, a respirator, and hearing protection and NO smoking when operating this machine



– Turn the main switch **ON**. (Fig3.14.2)
Test run the main blade rise/fall
Test run the main blade tilting
Test run the main blade
Test run the scoring blade

fig 3-14.2

4-2. SAW BLADE LIFTING AND TILTING

SAW BLADE LIFTING

– Turn knob A(fig. 4-2.1)counter clockwise : the saw blade rises.
– Adjust the saw blade height according to the workpiece thickness.
– The saw blade height is right when it exceeds the piece thickness 1 ~ 1.5cm
– Set the standard guard C(fig. 4-2. 2) to a max. height 4 ~ 5mm from the workiece.

SAW BLADE TILTING
–Turn handwheel B(fig 4-2.1) to tilt the saw blade up to the demanded degree based on scale

◎ **During the machine working, pay attention when the sliding table is totally on the left, the blades remains uncovered.(fig 3-9.2)**

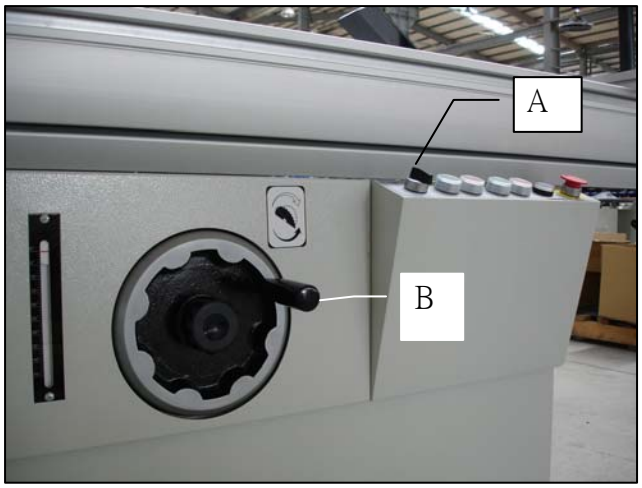
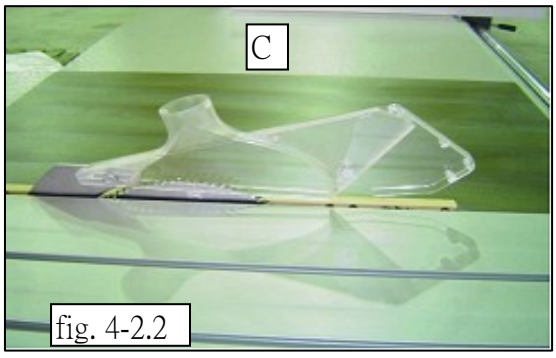


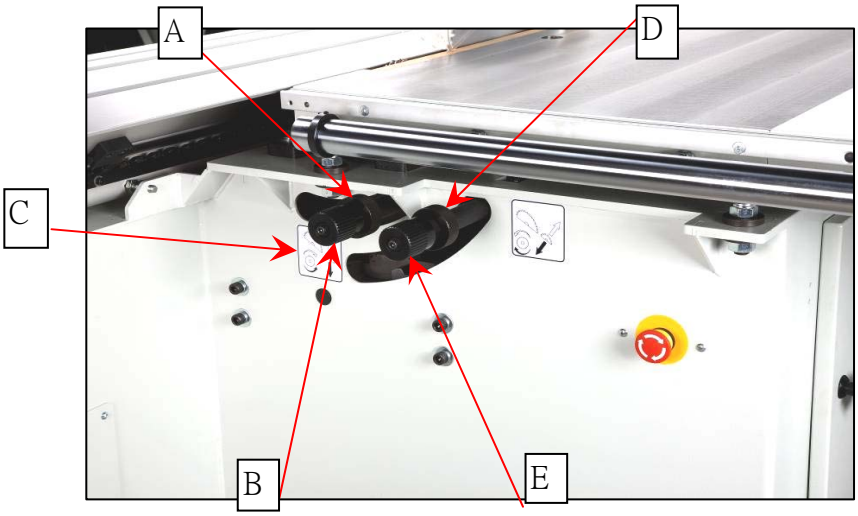
fig 4-2.1



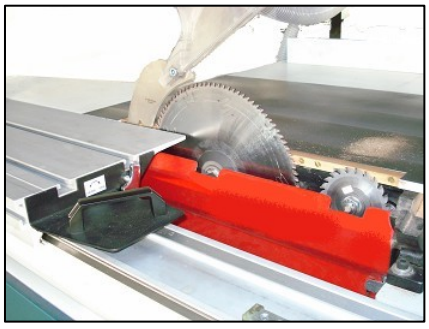
4-3. SCORING ADJUSTING

SCORING HEIGHT ADJUSTING
– Loosen nut A(fig 4-3.1)
– Move the draw bar B(fig 4-3.1) along the sector C(fig 4-3.1) to the height desired, and tighten nut A(fig 4-3.1)
– The projection adjusting range varies from 0 to 5mm
NOTE : When it is not necessary to use the corer, lower the scorer to the end of stroke under the table.

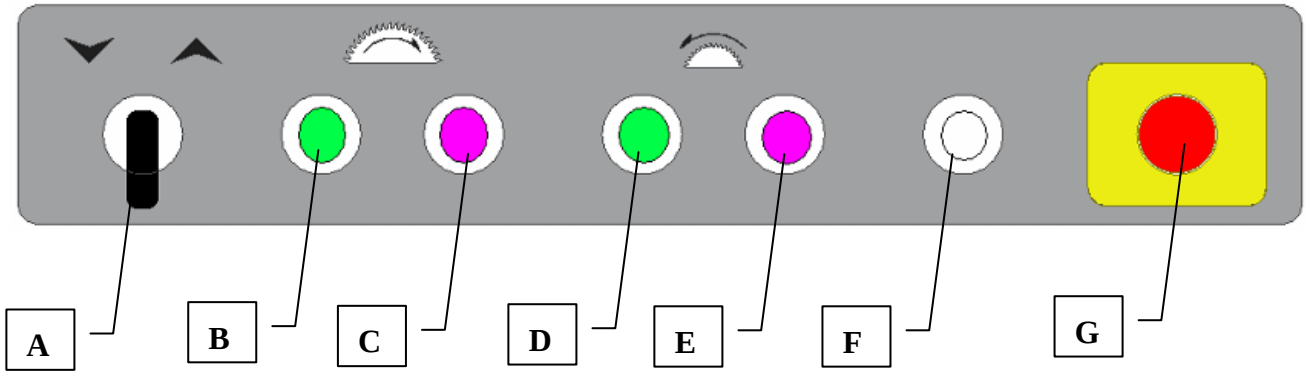
ALIGHING THE SCORING WITH THE SAW BLADE :
– The operator have to make some cutting tests.
– Loosen nut D(fig 4-3.1)
– Turn draw bar E(fig 4-3.1) to the desired position, and tighten nut D(fig 4-3.1)
turn clockwise, the scorer move to left
turn counter clockwise , the scorer move to right
–The range for traverse adjustment of the scorer is approx. +/-2mm
NOTE : Test cut to check the alignement is necessary.



◎ **During the machine use with scoring unit, pay attention when the sliding table is totally on the left ,for working a part of the blades remains uncovered.**



4-4.OPERATIONS-D405

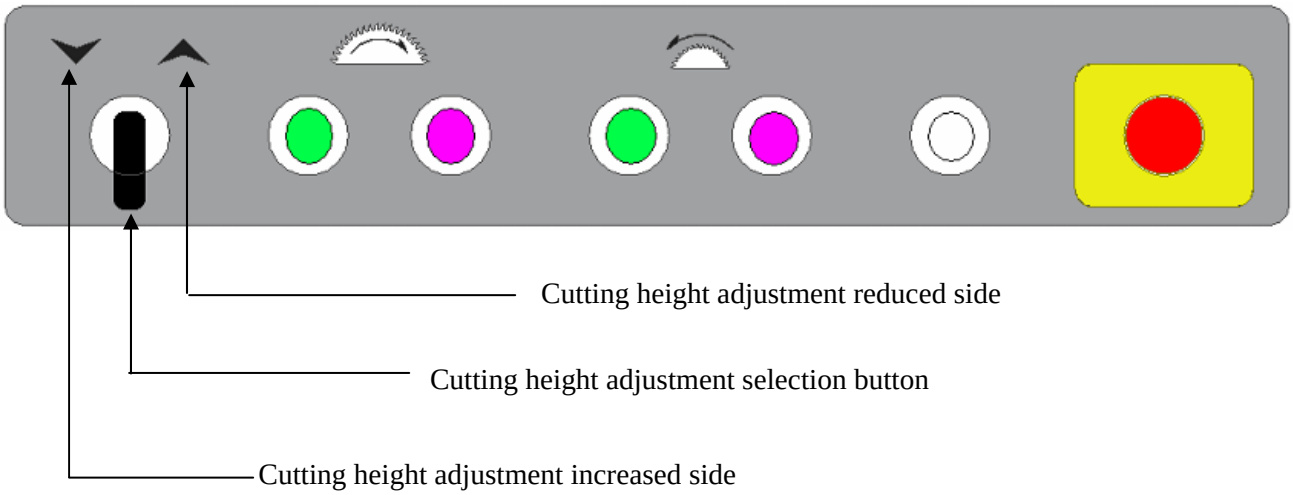


Control panel close-up

A. MAIN BLADE Rise / Fall Switch—Rise/Fall function switch of the main saw blade.
B. MAIN BLADE ON Button—Starts the main saw blade.
C. MAIN BLADE OFF Button—Stops the main blade.
D. SCORING BLADE ON Button—Starts the scoring blade. Note—The main saw blade must be ON for the scoring blade to start.
E. SCORING OFF Button—Stops the scoring blade.
F. POWER LIGHT.
G. EMERGENCY STOP Button—Disconnects power to all motors in the motor cabinet

● Raise and Fall of the main saw blade

- Height adjustment of the main saw blade


Cutting height adjustment reduced side
Cutting height adjustment selection button
Cutting height adjustment increased side

Cutting height adjustment

- Infinite precision adjustment:
- The cutting height is reduced by Press the **Selection button** turn to reduced side.
- The cutting height is increased by Press the **Selection button** turn to increased side.

4-5. 3 SPEED CHANGE

– Set the saw unit down
– Stop the machine , turn the main switch to 0 ; then lock it and indicating this with a sign
– Open the rear door
– Loosen knob A(fig 4-5.1)
– Lift lever B(fig 4-5.1) of belt stretcher to the end of stroke, then tighten knob A(fig 4-5.1) the belts are slack and may be replaced
– Set the belts in the proper races (the smallest dia. gap set as 5000rpm, the middle dia. gap sets as the smallest dia. groove set as 5000rpm, the middle dia. groove set as 4000rpm, the largest dia. groove set as 3000rpm.
– Loosen knob A(fig 4-5.1)
– Move lever B(fig 4-5.1) of belt stretcher to iniial position (that is totally down) to stretch the belts
– Tighten knob A(fig 4-5.1)
– Close the rear door
* Make sure that the selected rotation speed is proper for the working and for the saw blade.

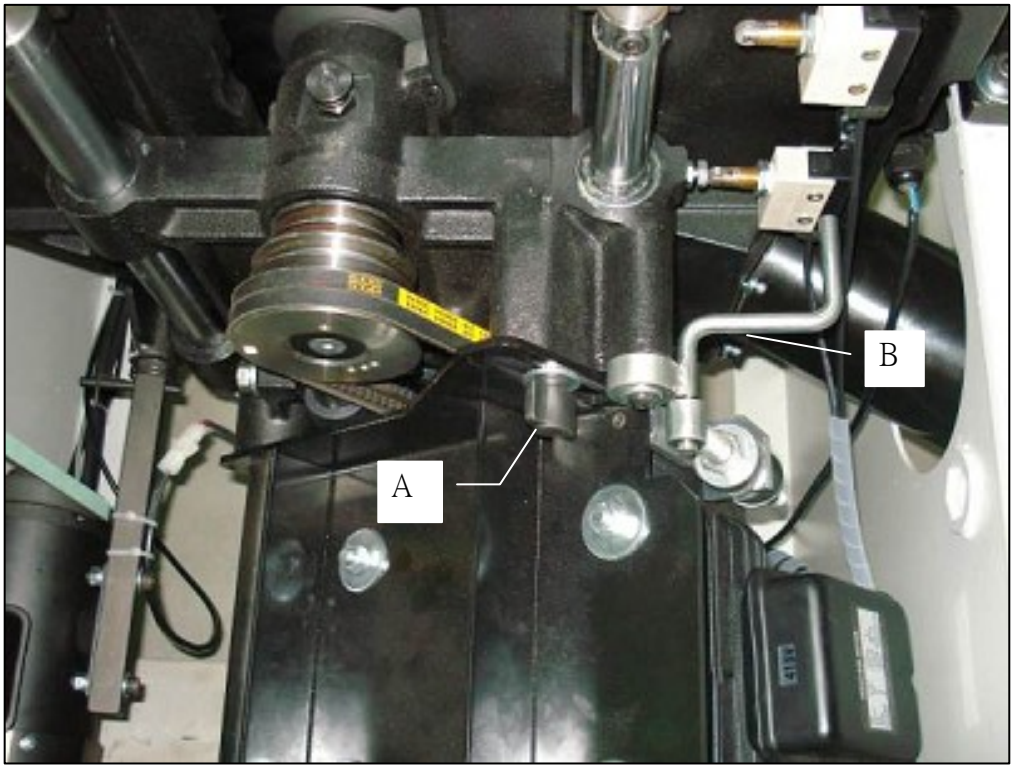


fig 4-5.1

4-6. SETTING TO ZERO THE FENCE FOR PARALLEL CUTS

Make sure the distance before operation

- Turn off power , and lift the saw guard
- Unlock the fence for parallel cuts A(fig 4-6.1) by means of knob F(fig 4-6.1) & handleB(fig 4-6.1) and move it in order to read a value between edge C(fig 4-6.1) turned to the blade and millimeter rule
- Measure the distance D(fig 4-6.1) between saw blade and parallel fence
- Loosen ruler screw and move millimeter rule in order to read the same value previously measured on the edge C(fig 4-6.1) of fence.
- Lock the fence unit with handle B(fig 4-6.1) , lower the guad and make a test cut
- Tighten knob F(fig 4-6.1)

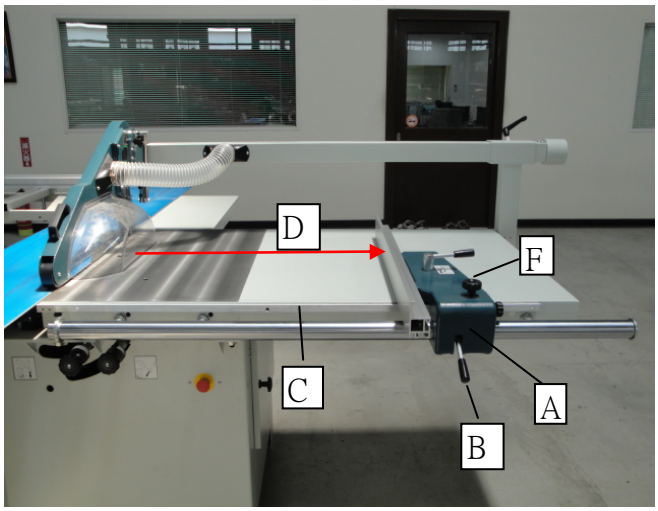


fig 4-6.1

USE HE FENCE FOR PARALLEL CUTS

ADJUSTING :

- Move sliding table M(fig 4-6.3) lock knob K(fig 4-6.3)
- Lift lever A(fig 4-6.2) for unlocking the fence unit.
- Move the fence unit near the desired measure as much as possible (read out the value on millimeter rule C(fig 4-6.2))
- For micrometic setting rip fence,turn knob B(fig 4-6.2) clockwise for locking rip fence, unlock lever A (fig 4-6.2), turn knob D(fig 4-6.2)
  Turn clocwise, the rip fence move to left ; turn counter clocwise, the rip fence move to right
- After reaching the measure, lock the fence unit by lowering lever A(fig 4-6.2)

Rule F(fig 4-6.2) can move in longitudinaldirection after unlocking handles G(fig 4-6.2) ; after every adjustmen, tighten handles

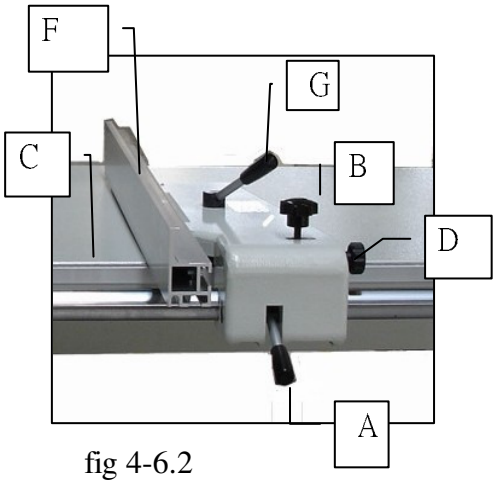


fig 4-6.2

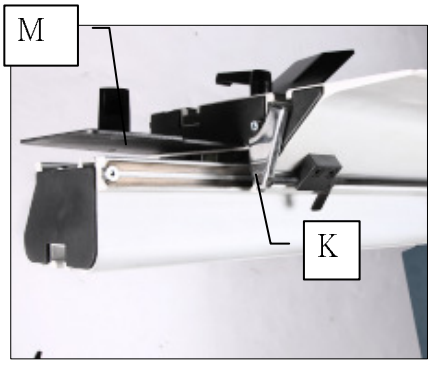


fig 4-6.3

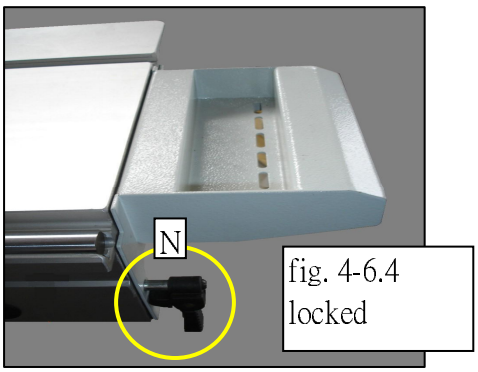


fig. 4-6.4
locked

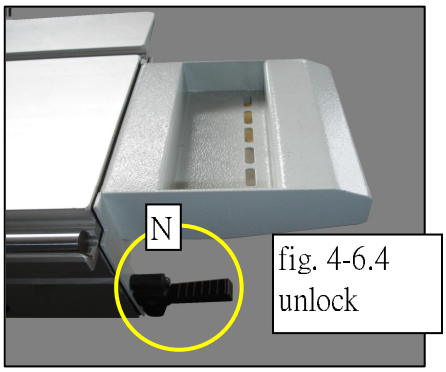


fig. 4-6.4
unlock

Note : For D405, PLEASE RELEASE OR LOCK THE ROD N (fig4-6.4)
FOR MOVING THE SLIDING TABLE.

POSITION OF ALLOY RULE

- Vertical position F(fig 4-6.2) turn to the workpiece
- Horizontal position for cutting thin workpiece and for slanting cuts.
  It is possible to move the workpiece forwards by using pusher.
- Tighten the handle G(fig 4-6.2)

* For the execution of special working, the operator is obliged to put his hands near the tools. Based on safety reasons, use a properpusher to move the workpiece forwards. To push it against the fence or to move it away after cutting.

NOTE : Take off the rip fence unit

- Loosen lever A(fig 4-6.2)
- Loosen knob B(fig 4-6.2)
- Move rip fence to the max. distance from the saw blade.
- Lightly turn fence unit around bar , and to switch it off.

4-7. SLIDING TABLE

The sliding table moves on high precision slideways made of hardened steel in order to ensurethe uniform and smoothly motion with small friction, necessary for obtaining precise cut.
The sliding table is locked and unlocked by means of lever A(fig 4-7.1)

- Lever up : sliding table unlocked
- Lever down : sliding table locked.

NOTE : Lock sliding table before placing heavy workpiece for safe location.

USE OF SLIDING TABLE AND FRAME FOR LARGE PANELS
Longitudinal positioning of the frame
D401M : Lock/Unlock the sliding table by means of knob A for placing large workpiece
D405M : Lock/Unlock the sliding table by means of rod B for placing large workpiece

- Move the frame by means handle M(fig 4-7.2) or C (fig.4-7.3)
- Lock knob

◎ To remove the sliding table of D405M over the saw blade center , please move to the end and backward a little for opening the second positioning design

USE OF THE HOLD DOWN :

- Loosen handle to adjust the foot height

◎ To ensure a strong panel clamping, the foot shall be at a 2mm height from the panel surface before lowering the lever.

- By means of lever H(fig 4-7.3) lower foot F(fig 4-7.3) for clamping the workpiece

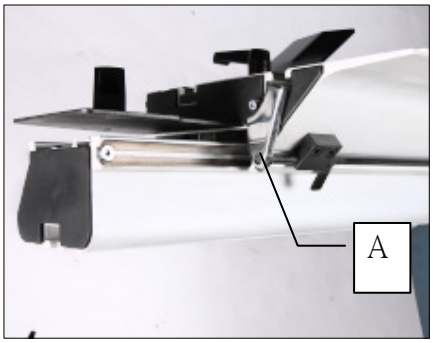


fig 4-7.1

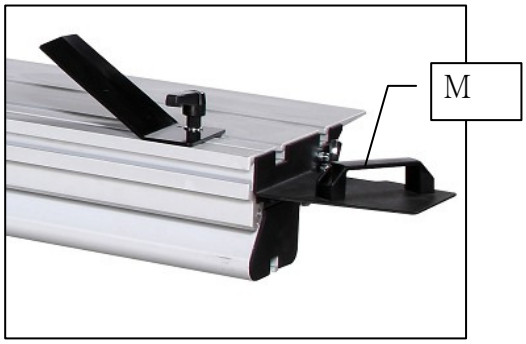


fig 4-7.2

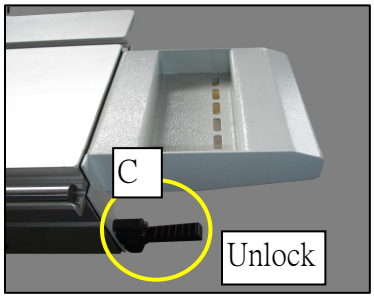


fig 4-7.3

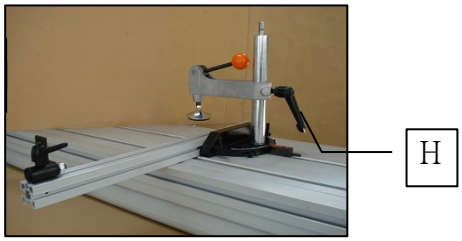


fig 4-7.4

4-8 SETTING TO ZERO THE REST RULE

NOTE : Before starting the zero setting align rule A(fig 4-8.1),
After aligning the crosscut fence, lift and turn it over on the frame.

- Fit crosscut fence into the groove C(fig 4-8.1) of crosscut table based on demands.
- Lock knob for fixing
- Turn threaded nut E (fig4-8.1b) to adjust crosscut fence and crosscut table be parallel. Then lock knob F (fig4-8.1b) for fixing.

Turn on the machine, then trimming with the crosscut fence.

fig 4-8.1

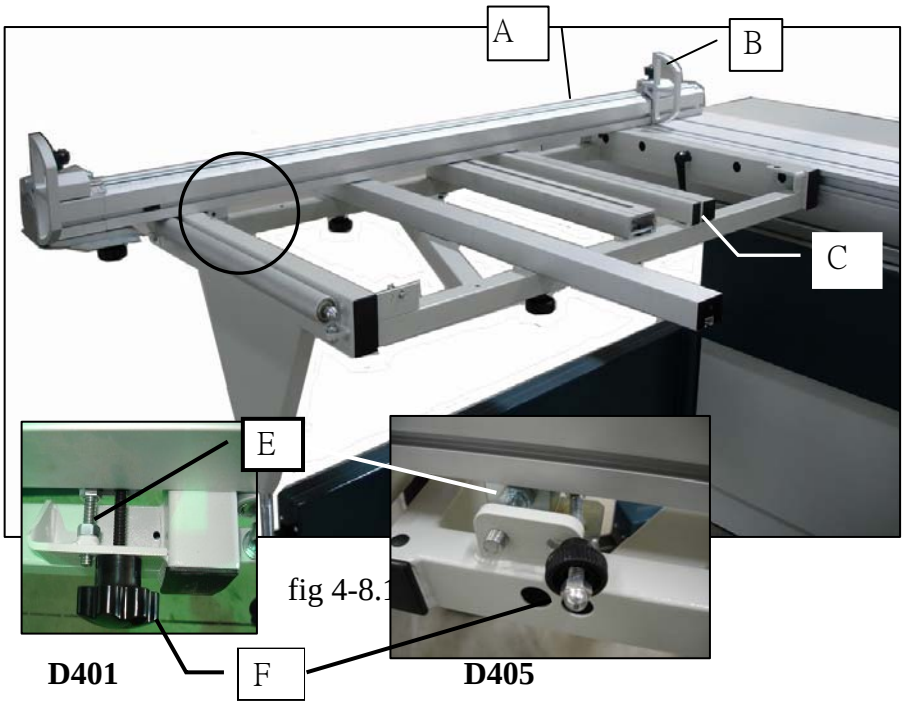


fig 4-8.1

ZEROSETTING CHECK

– Lower the guard, trim a panel on 2 sides in order that they are perpendicular to each other
– Lock stop G(fig 4-8.2) on the rule at given measure, so that the panel may be cut.
– Rest the panel edge already trimmed against crosscut fence, and the other trimmed edge against stop G
– After cutting, measure the cutting width.

SETTING TO ZERO THE CENTRAL MILLIMETER RULE

For cutting panels of width exceeding 1860mm, you have to use the extension part A(fig 4-8.2) by loosening knob B(fig 4-8.2)

– Move extension part A(fig 4-8.2) , so that it touches fixed part C(fig 4-8.2)

– Take the measure corresponding to internal edge of stop D(fig 4-5.8) on millimeter rule E(fig 4-8.2) , so that point F(fig 4-8.2) indicates the same measure

– Tighten knob

Everytime while using extension part for cutting large panels , point F(fig 4-8.2) indicates the measure.

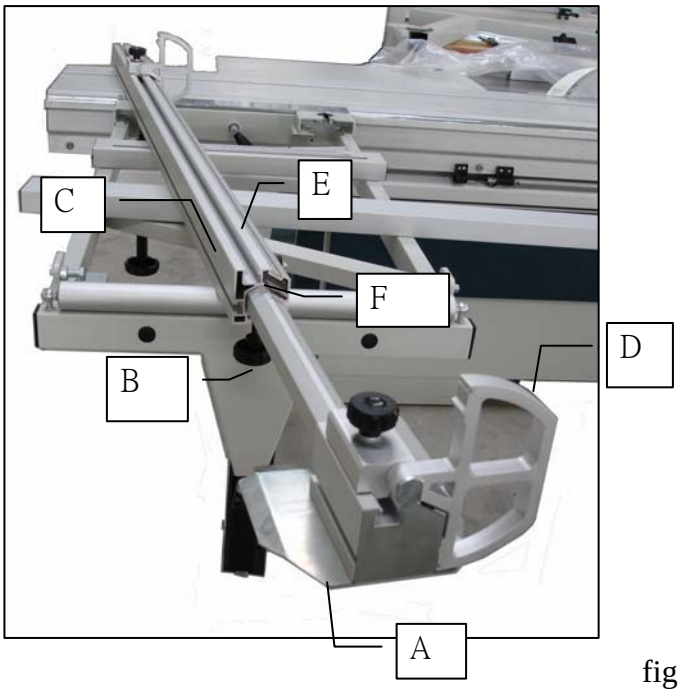


fig 4-8.2

RULE ADJUSTING FOR OBLIUE CUTS

– Loosen knob D(fig 4-8.1) & grub screw F(fig 4-8.1b) to change position of crosscut fence

– Adjust the position for making sure the right side of the fence G(fig 4-8.1) aligning with the desired angle

– Tighten knob

Cleaning & Checking Schedule

Check items	Daily	Weekly	Monthly	3-months	6-months	yearly
Check emergency stop and indicate lamp whether normal or not?	✓				✓	
Check the integrity of noise, pressure and ventilation of the machine.	✓			✓	✓	
Clean the exterior part of the machine	✓		✓			
Check all the screws from the machine whether tight or not?					✓	
Check screws and nuts of limit switch whether tight or not?	✓				✓	✓
Check all wires and electric connections near the power switch to see if there have any			✓		✓	✓
Check belt running normal or not? If any break or failure, replace it.	✓		✓		✓	
Check the load voltage and current of the motor			✓			✓
Check the continuity of all the wires		✓				
Clean the interior part of the electrical box and check the continuity of the wires.			✓			
Tighten the terminal screws of the power supply wires in the control box					✓	
Any worn or damaged parts and unsafe condition.	✓			✓		
Clean & vacuum dust buildup from inside cabinet.			✓			

5-1. MACHINE CLEANING & CHECK

◎ **Before carrying out maintenance operations, adjustments or to demount any machine member turn main switch to 0 , lock it then indicate this with a sign.**

The general cleaning ensure the long life of the machine and is an important safety factor.
Using aspirator to clean the machine

- Eliminate dust and chips from the table and all cavities
- Weekly clean all moving prts in particular the elements exposed to the dust and to the resin by using a brush or cloth with safe solvent.
- Carefully clean : guides of crosscut fence , slidewqys of the sliding table , rod of the fence , and groove by safe solvent.

◎ CHECK OF SAFETY DEVICES
For safe usage of the machine, the safety devices shall be efficient.
Check the controls for emergency stops every 2 weeks with a test :
With he machine under normal operating condition, press the emergency button arranged on the machine : the saw blade shll stop.

NOTE : If the belts get slack, the braking time may increase. Therefore, make sure that the belts are stretched or in good condition.
Please stop processing and contact the local agent a.s.a.p. while the machine has troubles.

MACHINE REMOVAL - STORING
Disconnect the machine from the electrical and pneumatic system. After totally clean the machine, wipe antirust protection on it, and preventing the machine in enviroments.

5-2. PERIODICAL LUBRICATION

An accurate lubrication ensures the long life as well as the best peformance of the machine.

Weekly lubricate with grease
* Disconnect the electrical and pneumatic system.

WormsB(fig 5-2.1) and toothed sector A(fig 5-2.2) for height adjusting and tilting of the saw blade

fig 5-2.1

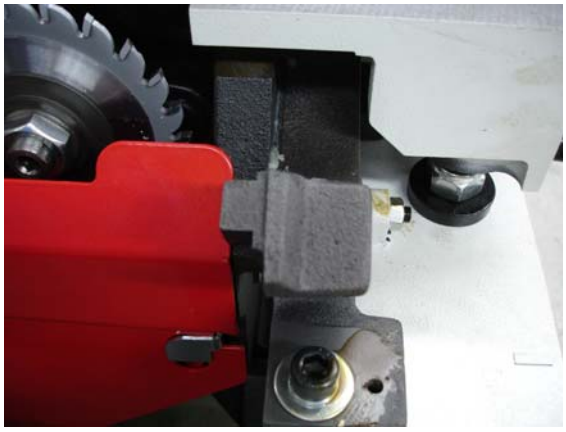


fig 5-2.2

5 - 3. REPLACING BELT

Disconnect the machine from the electrical and pneumatic system
REPLACING THE SCORER SPINDLE BELT
– Take off the rear door
– Lift the small motor A(fig 5-3.1) and support it. The belt is slack and can be replaced
– Replace the new belt and lower the motor
– Manually make the belt cover 2 or 3 complete turns , so that it can get the right settling.
– Fit the rear cover again
The belt remains always stretched by the motor weight.

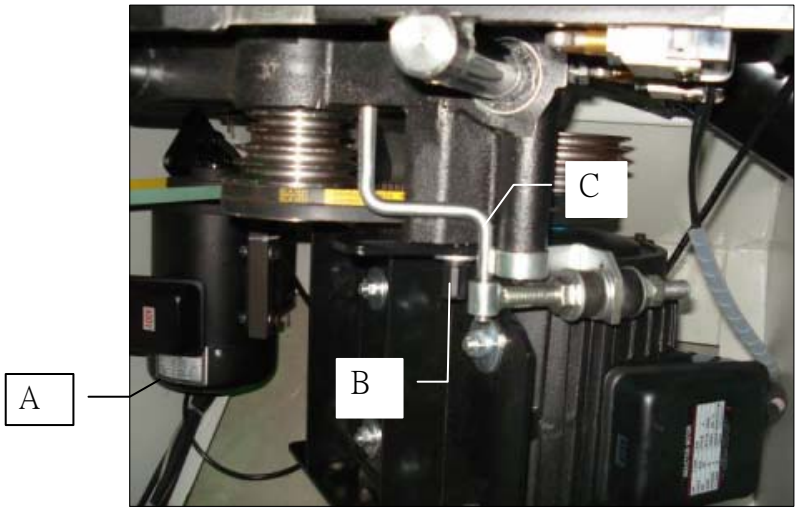


fig 5-3.

REPLACING THE SAW SPINDLE BELTS
– Set the saw unit down.
– Open rear door
– Loosen knob B(fig 5-3.1)
–Lift lever C(fig 5-3.1) of belt stretcher to the end of stroke, then tighten knob A(fig 5-3.1). The belts are slack and an be replaced.
– Set the belts in the proer races
– Move lever C(fig 5-3.1) of belt stretcher to initial position (that is totally down) to stretch the belts
– Tighten knob A(fig 5-3.1), and close the rear door
NOTE : Never couple belts of different make , and set. Replace the pair of belts instead of only one belt is necessary.

BELT STRETCHING
◎After the first working period, or after many working hours, the belts get slack. It will increase the time required to stop the saw blade. So periodically check this part is necessary.

6. TOOLS

TOOLS INVENTORY

- Tool Box
- Riving Knife Φ300~350
- Open spanner 24~27,30mm
- Arbor Set
- Push Stick & Supporting Pad

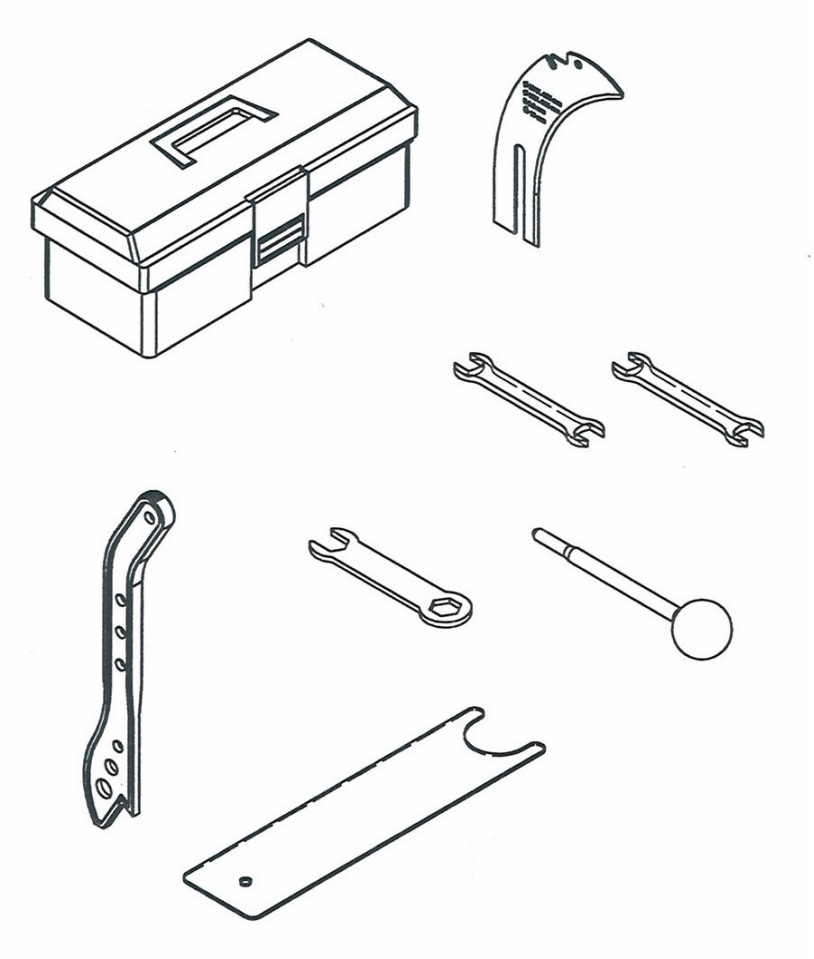


fig 6-1.2

7-1. Troubleshooting

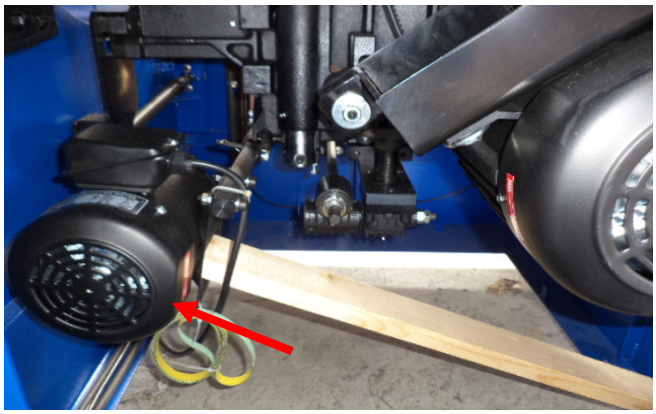
WARNING-Disconnect the machine from the power source. For preventing serious personal injury, the professional technician turn off power before troubleshooting.

Problem	Possible cause	Troubleshooting
The machine cannot be switched on.	1. Door in machine frame or saw blades cover plate is opened. 2. Control circuit fuses defective.	1.Close the machine door or cover plate. 2. Turn off the main switch, open the switch cabinet and identify which of the fuses is defective and remove it. Replace new fuses, only using fuses of the same rating!
The machine switches off automatically during operation.	1. Power failure in one or several phases due to responding factory fuses. 2. Overload protection has responded due to blunt saw or excessive feed speed. 3. Control circuit fuses defective.	1. Eliminate cause of phase failure. 2. Change saw blade or reduce feed speed. Allow motor to cool down. 3. Turn off the main switch, open the switch cabinet and identify which of the fuses is defective and remove it. Replace new fuses, only using fuses of the same rating!
Motor will not start, or it growls on start up.	1. Emergency stop button is depressed. 2. Power supply fuse or circuit breaker has tripped. 3. Thermal overload has tripped. 4. Toggle switch is broken inside. 5. Start capacitor is at fault. 6. Motor fan cover is dented, stopping the fan from being able to spin. 7. Motor is at fault.	1. Rotate the button clockwise and allow it to pop out. 2. Disconnect power, and inspect circuit for electrical shorts and repair. Replace circuit breaker if it is old or has tripped many times. 3. Reset the thermal overload. 4. Disconnect power, and use an ohmmeter to check switch terminals for continuity, and replace switch if required. 5. Replace start capacitor. 6. Replace motor fan cover (and fan, if damaged). 7. Replace motor.
Motor fails to develop full power (output of motor decreases rapidly with decrease in voltage at motor terminals).	1. Power line overloaded with lights, appliances, and other motors. 2. Undersized wires or circuits too long.	1. Reduce load on power line. 2. Increase wire sizes or reduce length of the circuit.

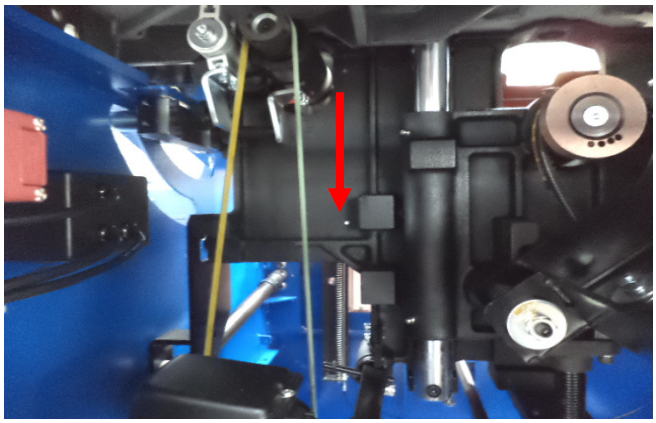
Problem	Possible cause	Troubleshooting
Motor overheats.	1. Motor overloaded. 2. Air circulation through the motor restricted.	1. Reduce load on motor. 2. Clean out motor to provide normal air circula-tion.
Motor stalls (resulting in blown fuses or tripped circuit).	1. Short circuit in motor or loose con-nections. 2. Low voltage. 3. Incorrect fuses or circuit breakers in power line. 4. Motor overloaded.	1. Repair loose or shorted terminals, or worn insulation on motor. 2. Correct the low voltage conditions. 3. Install correct fuses or circuit breakers. 4. Reduce load on motor.
Main blade runs backwards.	1. Two of the power wires are reversed.	1. Exchange wires L1 & L3 in the terminal box.
Blade makes a squealing noise on start-up.	1. Belt worn out.	1. Replace belt .
Workpiece jammed when feeding forward.	1. Blunt saw blade. 2. Riving knife thickness does not match the saw blade used.	1. Fit a sharp saw blade 2. Fit the correct riving knife; it must thicker than the main saw blade (or at least the same)
The finished size of the cut workpiece does not match the cutting width set on the rip fence.	1. Dimension scale for cutting widths is misadjusted. 2. Incorrect scale position.	1. Reset the dimension scale to correct size. 2. Reset scale position. Cut a workpiece on the rip fence, precisely measure the cut width and position the scale to match workpiece size.
The finished size of the cut workpiece does not match the cutting width set on the crosscut stop.	1. Dimension scale for cutting widths is misadjusted. 2. Incorrect fence position.	1. Reset the flip stop to correct size. 2. Cut a workpiece on the crosscut fence, precisely measure the cut width and reset crosscut fence position to match workpiece size.
Sliding table saw does not cut square.	1. Sliding table is not parallel to blade. 2. Rip fence is not parallel to blade. 3. Crosscut fence is not perpendicular to the blade.	1. Adjust the sliding table . 2. Adjust the rip fence . 3. Adjust the crosscut fence perpendicular to the blade .
Saw blade burns on the sliding table side.	1. Insufficient free cut on sliding table.	1.Readjust the free cut.
Saw blade burns on the rip fence side.	1. Excessive free cut on the rip fence. 2. Insufficient free cut on rip fence.	1. Readjust the rip fence. 2. Readjust the free cut.

Problem	Possible cause	Troubleshooting
Saw blade burns on both sides.	1. Incorrect free cut setting. 2. Cut material jammed. 3. Operating error.	1. Readjust the free cut 2.Insert a riving knife in the cutting line or use a wider riving knife 3. Either move the workpiece to the left- or right-hand stop. Do not guide the workpiece on the rip fence when cutting with the sliding table.
Workpiece has burn marks.	1. Blunt saw blade. 2. Feed too low. 3. Saw blade has too many teeth. 4. Incorrect free cut.	1. Change the saw blade. 2. Increase the feed rate. 3. Change the saw blade. 4. Readjust the free cut.
Workpiece has burned edges, binds, or kicks back.	1. Sliding table is not parallel to blade. 2. Riving knife is not aligned with the blade. 3. Blade is warped.	1. Make sliding table parallel to the blade . 2. Shim the riving knife to align it with the main blade. 3. Replace the blade.
Workpiece has chip out on the bottom edge.	1. Scoring blade height is incorrect. 2. Scoring blade is not aligned with the main blade. 3. Scoring blade kerf does not match the main blade.	1. Adjust the height of the scoring blade. 2. Align the scoring blade. 3. Adjust the scoring blade kerf .
Breakout in spite of scoring.	1. Scorimg not aligned with main saw blade. 2. Scoring blade too narrow.	1. Readjust free cuts; the free cut should be almost “0”. 2. Adjust saw width.
Workpiece rises when cut with the scoring.	1. Blunt scoring blade . 2. Cutting height too low .	1. Exchange the sawing blade. 2. Set the scoring blade higher.
Loud repetitious noise coming from machine.	1. Pulley setscrews or keys are missing or loose. 2. Motor fan is hitting the cover. 3. Belts are defective or damaged.	1. Inspect keys and setscrews. Replace or tighten if necessary. 2. Adjust fan cover mounting position, tighten fan, or shim fan cover. 3. Replace belts.
Vibration when running or cut-ting.	1. Loose or damaged blade. 2. Worn arbor bearings. 3. Worn or damaged belts.	1. Tighten or replace blade. 2. Check/replace arbor bearings. 3. Replace belts.
Fence hits table top when sliding across table.	1. Front rail is too low. 2. Rip fence roller is too low.	1. Raise the rail. 2. Adjust the roller.

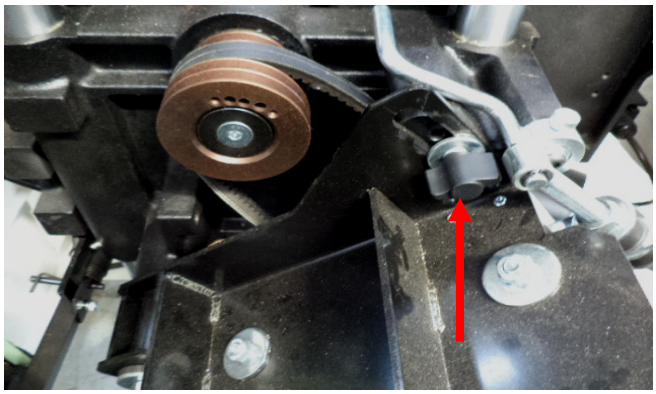
Beware of the following before operating



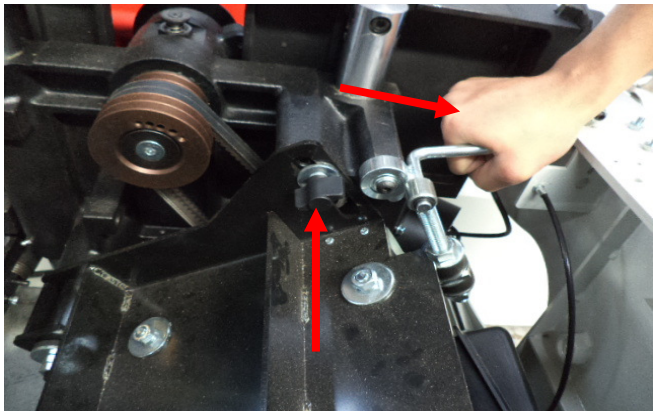
Before operating, lift up the scoring motor to remove the fixing wood block from the machine.



Put on the flat belt to the scoring shaft aware of the direction.

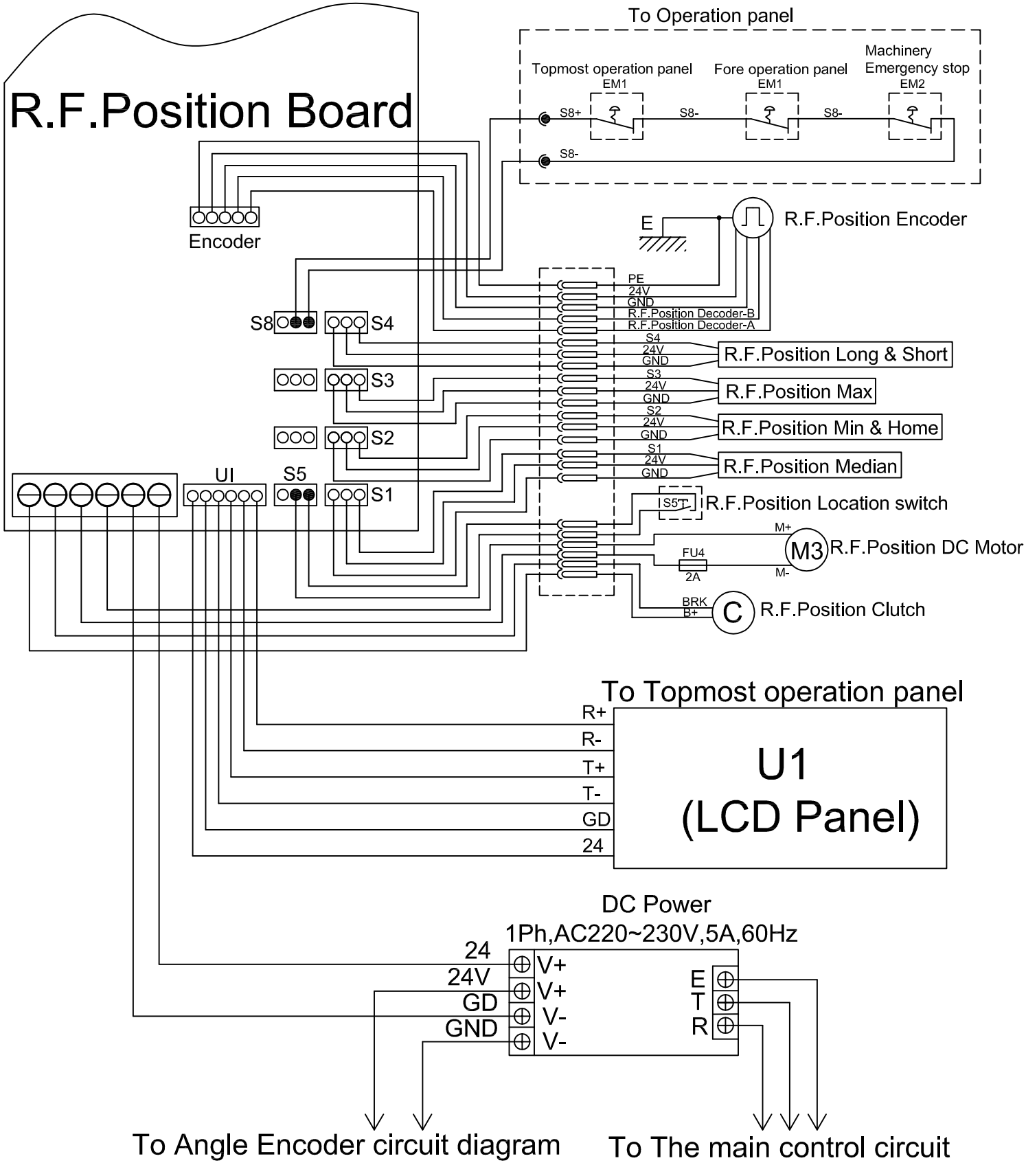


Loosen motor plate knob (see arrow)



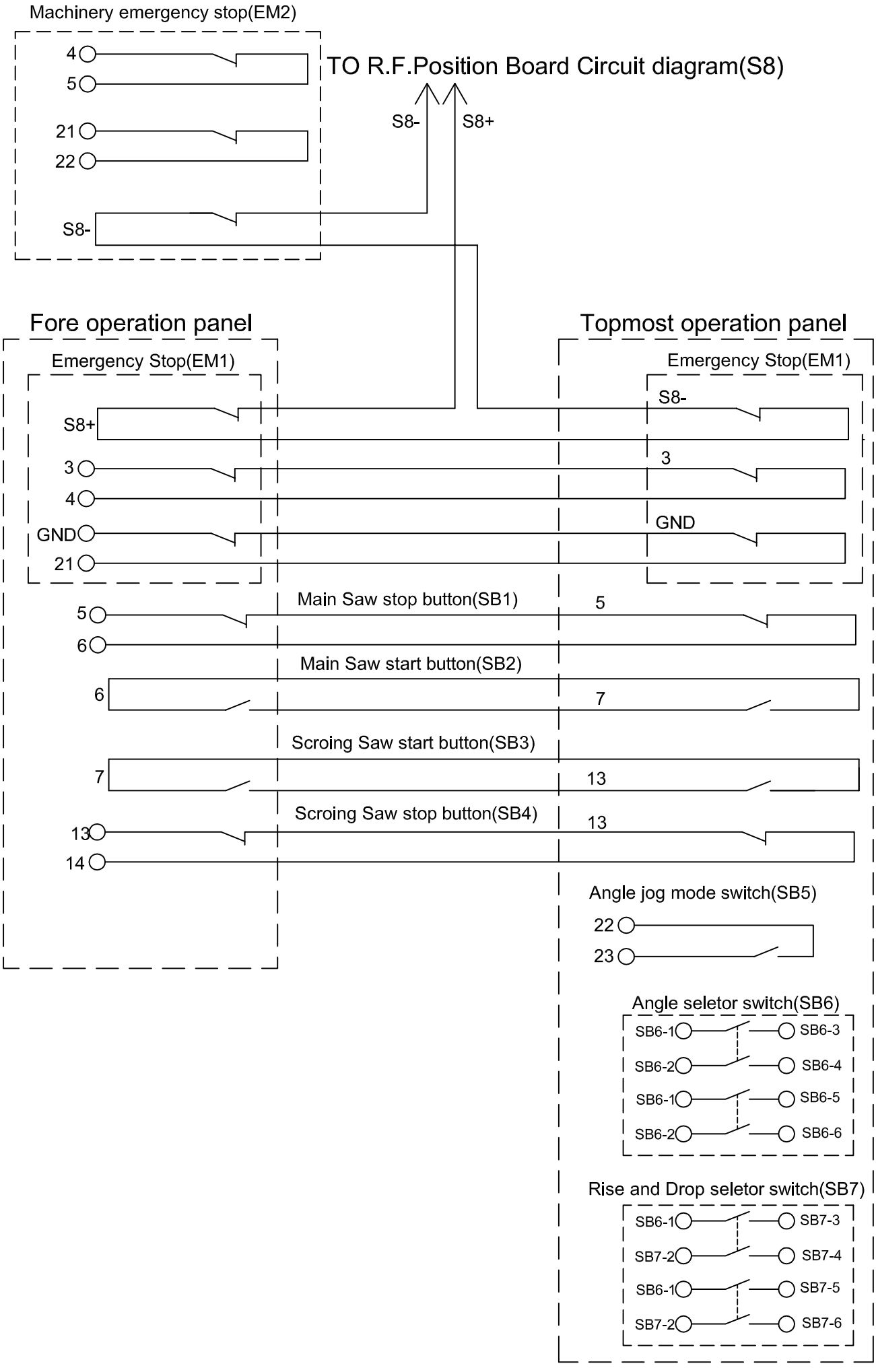
Rotate the handle to right hand side and press to tight the belt then lock the knob to finish.

SS-D405A3 CSA R.F.Position Board Circuit diagram



V1.0

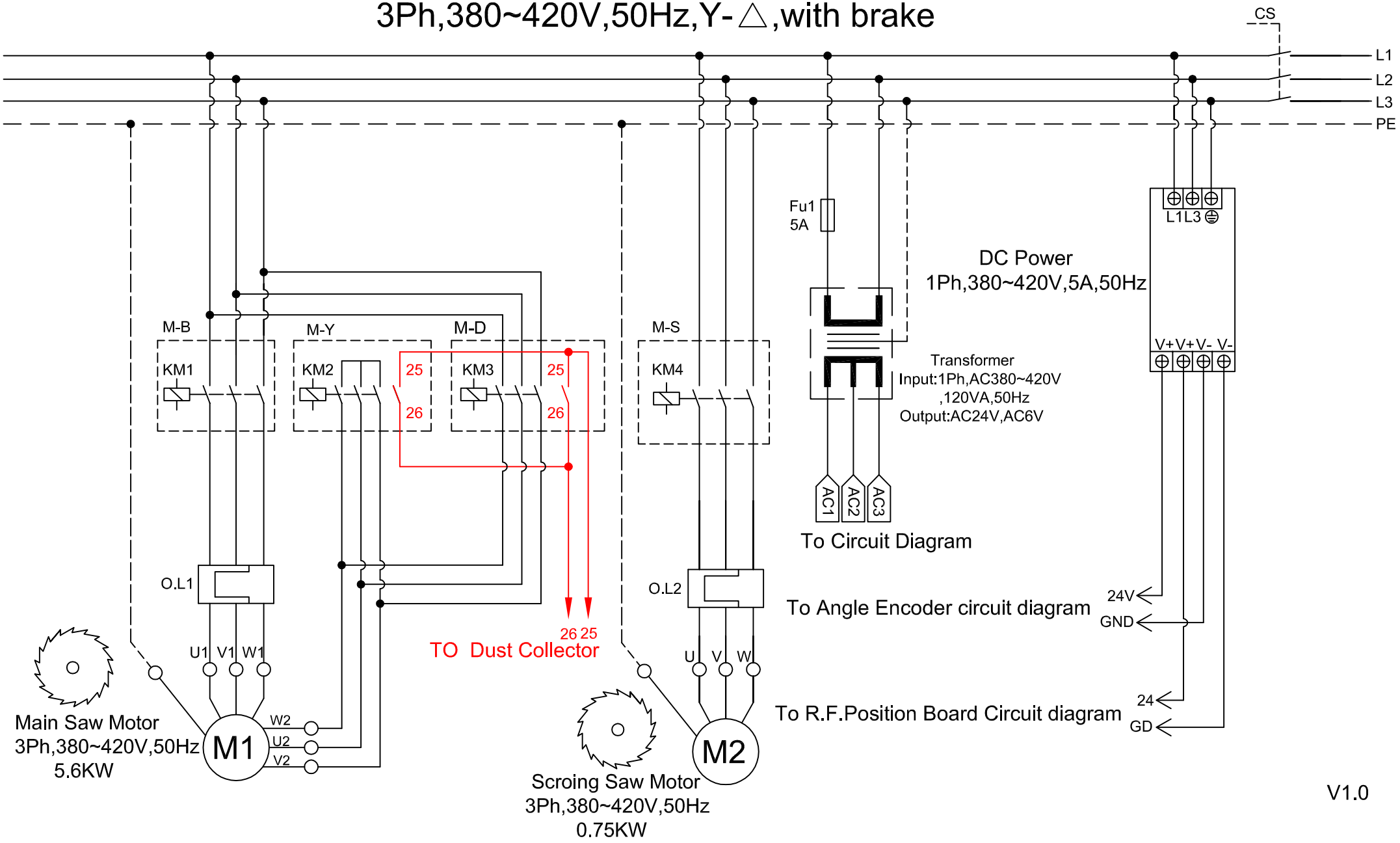
SS-D405A3 CE Operation panel



V1.0

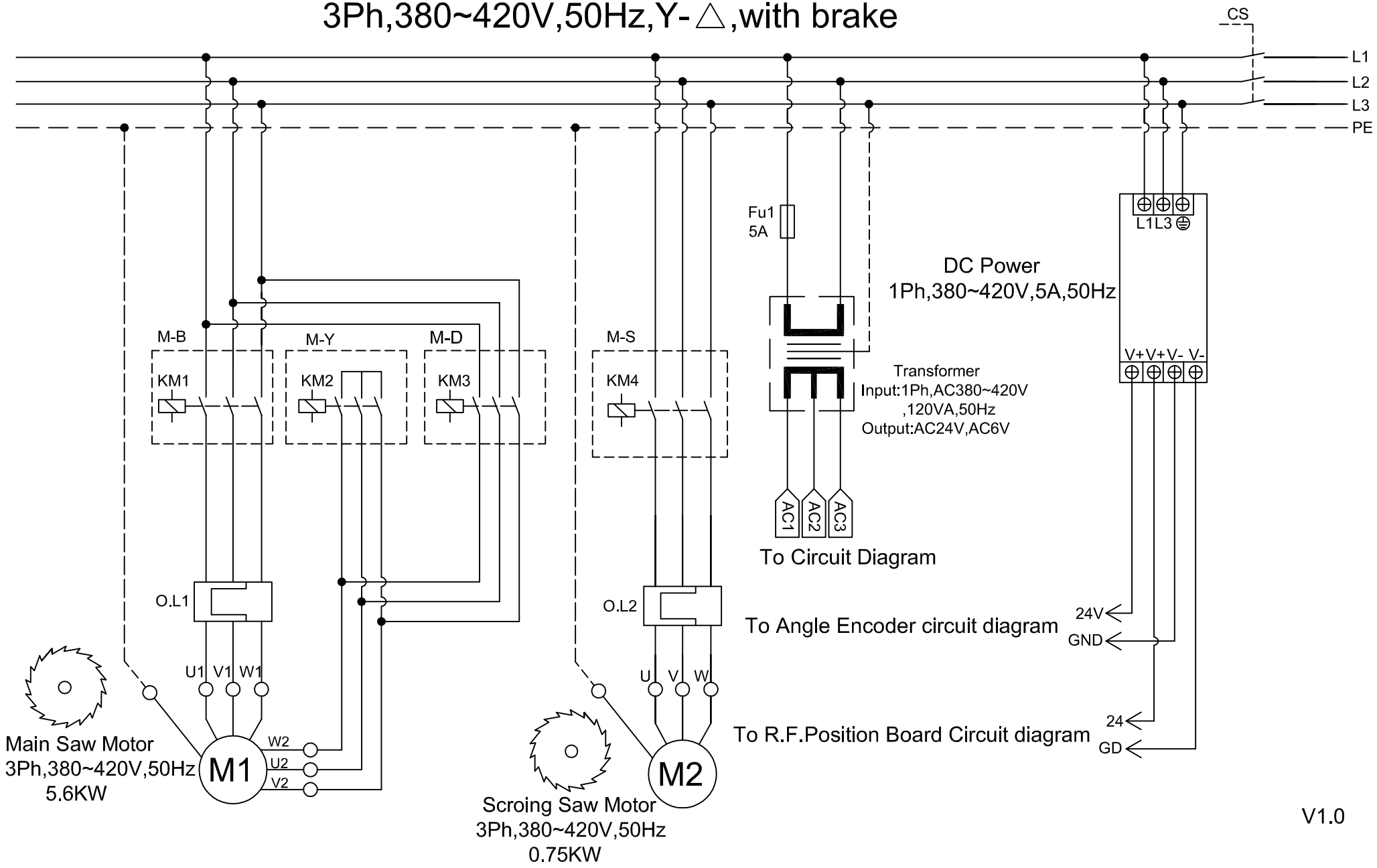
SS-D405A3 CE The main control circuit

3Ph,380~420V,50Hz,Y-△,with brake



SS-D405A3 CE The main control circuit

3Ph,380~420V,50Hz,Y-△,with brake



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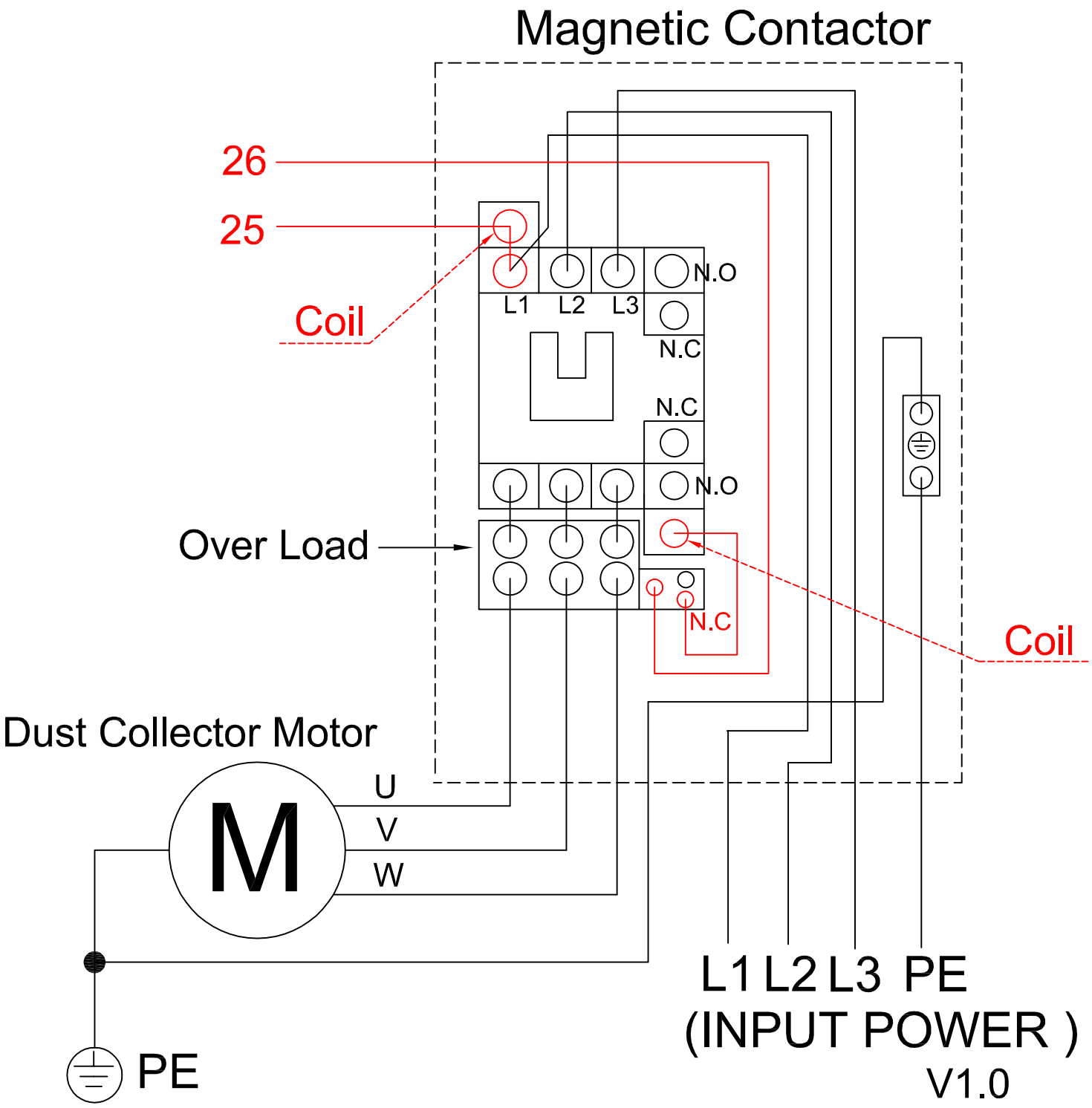
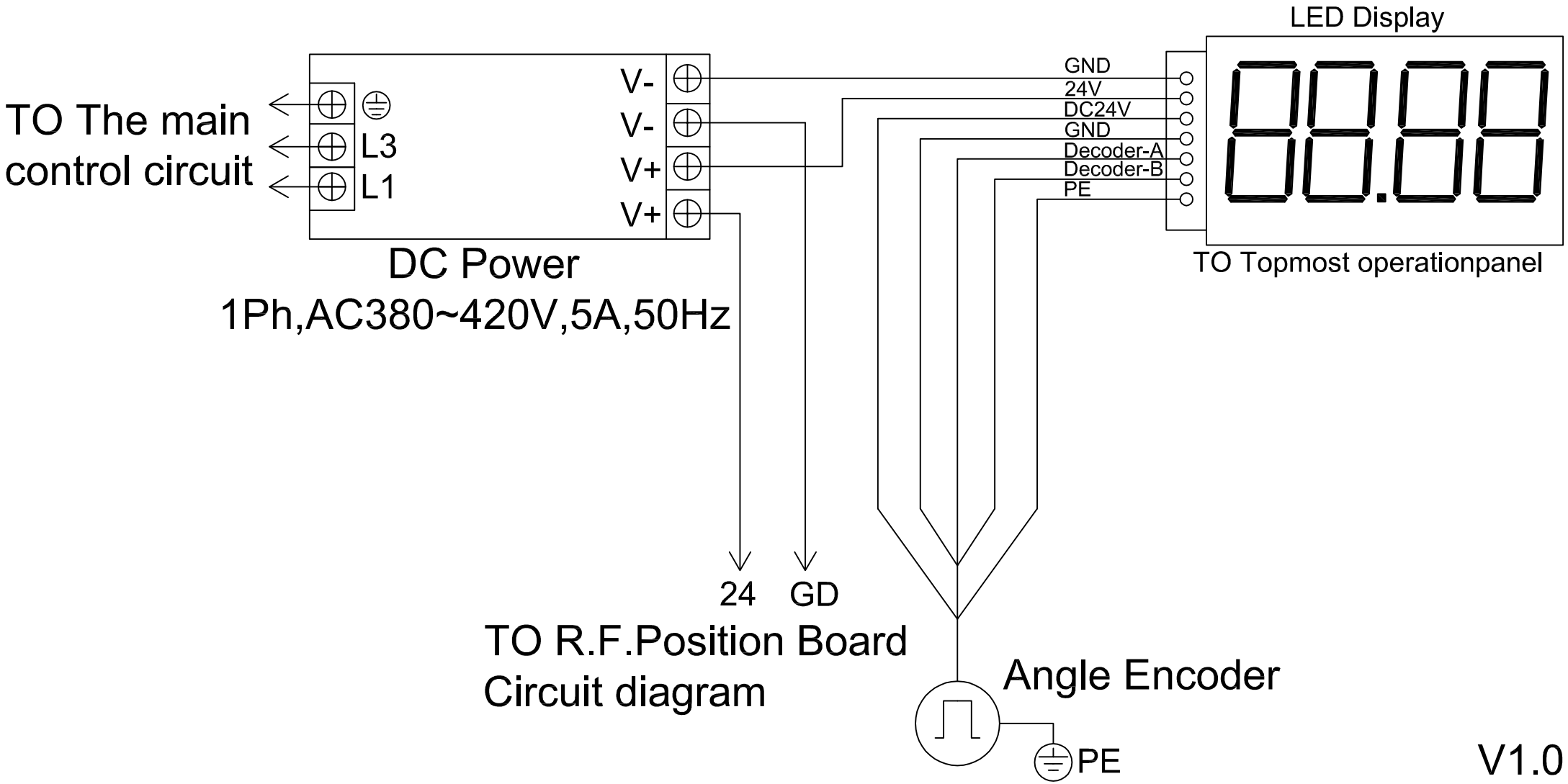
SS-D405A3 CE Dust Collector control circuit



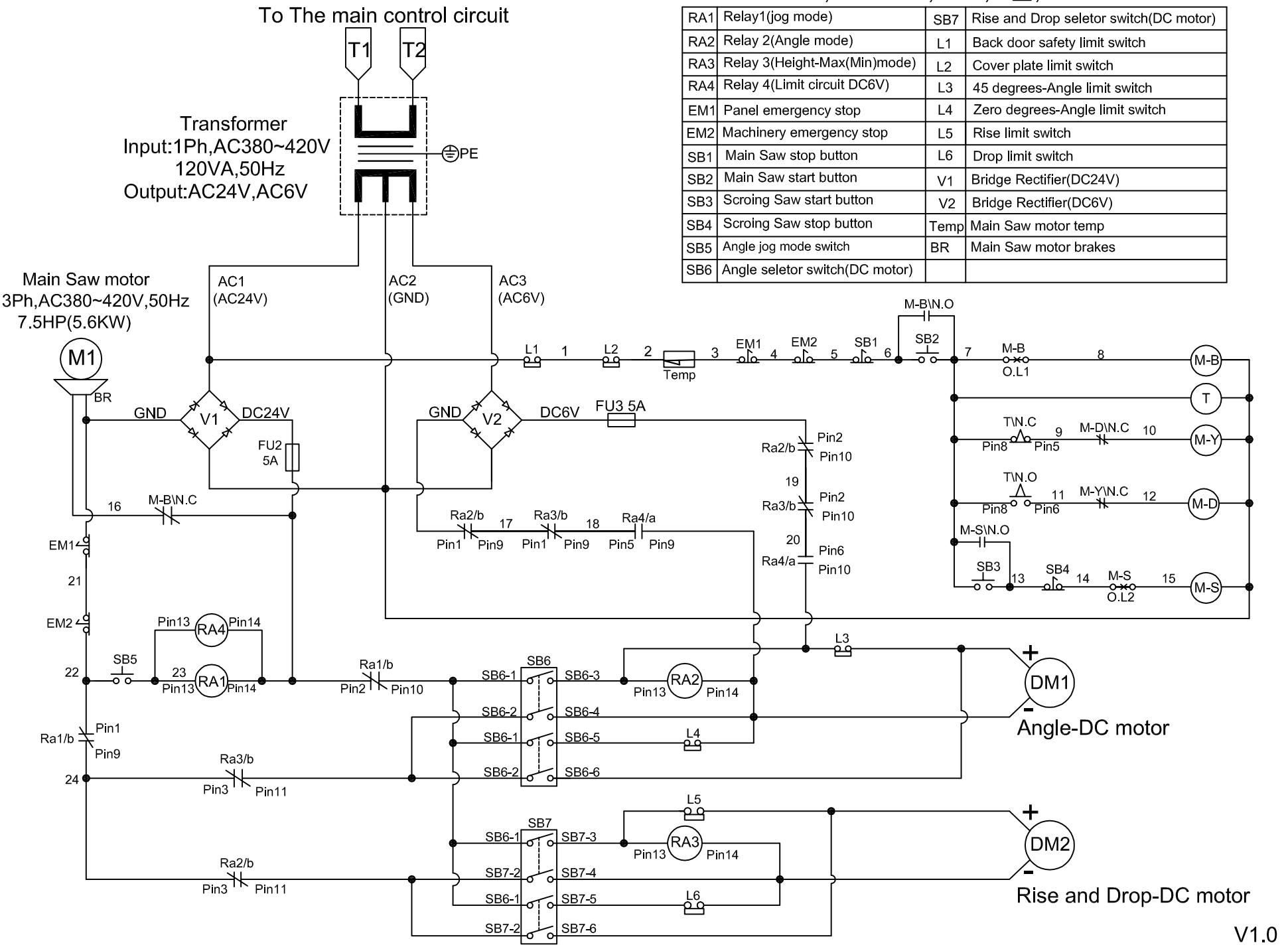
SS-D405A3 CE Angle Encoder circuit diagram



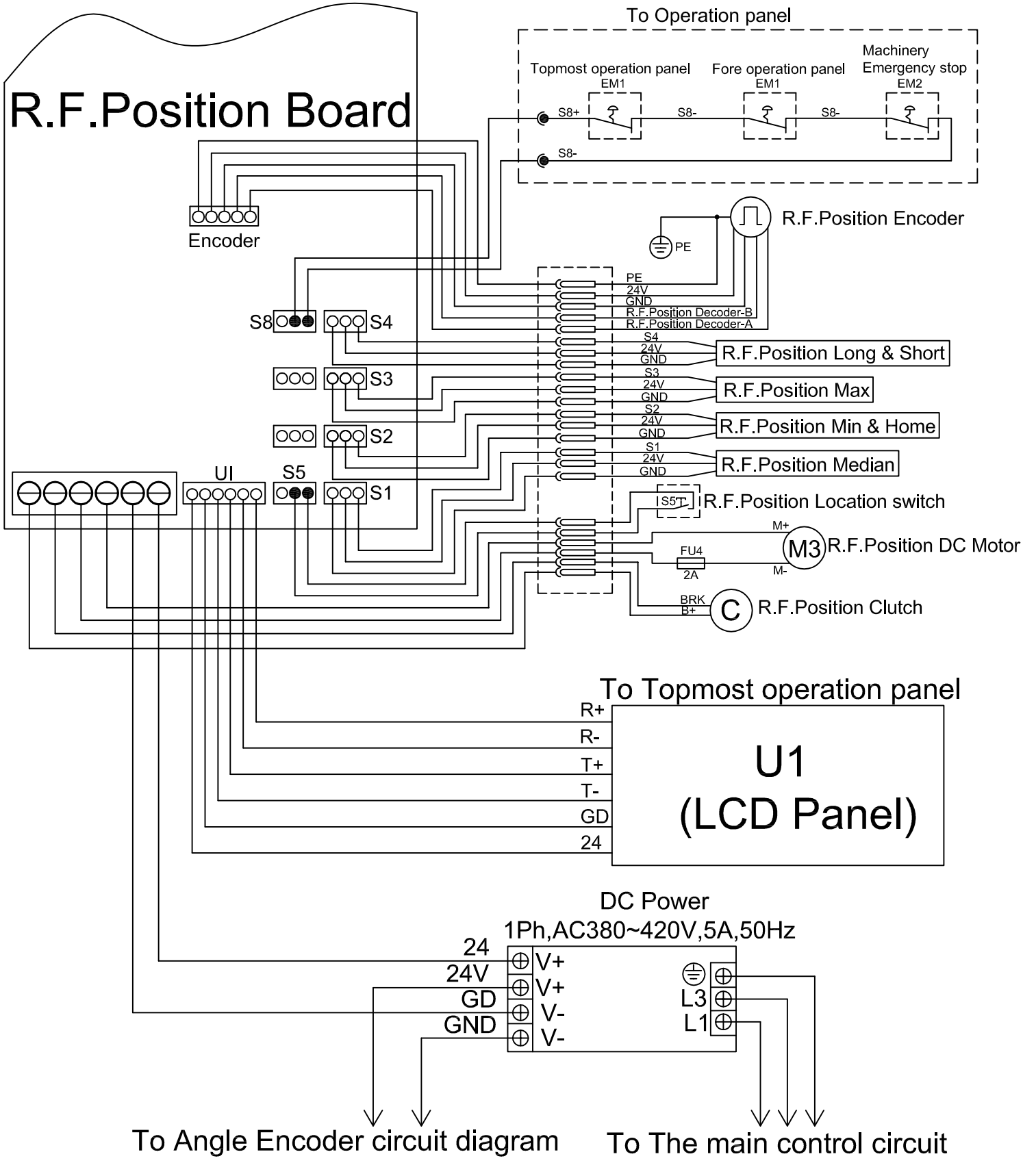
SS-D405A3 CE Circuit Diagram

3Ph,380~420V,50Hz,Y-△,with brake

RA1	Relay1(jog mode)	SB7	Rise and Drop seletor switch(DC motor)
RA2	Relay 2(Angle mode)	L1	Back door safety limit switch
RA3	Relay 3(Height-Max(Min)mode)	L2	Cover plate limit switch
RA4	Relay 4(Limit circuit DC6V)	L3	45 degrees-Angle limit switch
EM1	Panel emergency stop	L4	Zero degrees-Angle limit switch
EM2	Machinery emergency stop	L5	Rise limit switch
SB1	Main Saw stop button	L6	Drop limit switch
SB2	Main Saw start button	V1	Bridge Rectifier(DC24V)
SB3	Scroing Saw start button	V2	Bridge Rectifier(DC6V)
SB4	Scroing Saw stop button	Temp	Main Saw motor temp
SB5	Angle jog mode switch	BR	Main Saw motor brakes
SB6	Angle seletor switch(DC motor)		

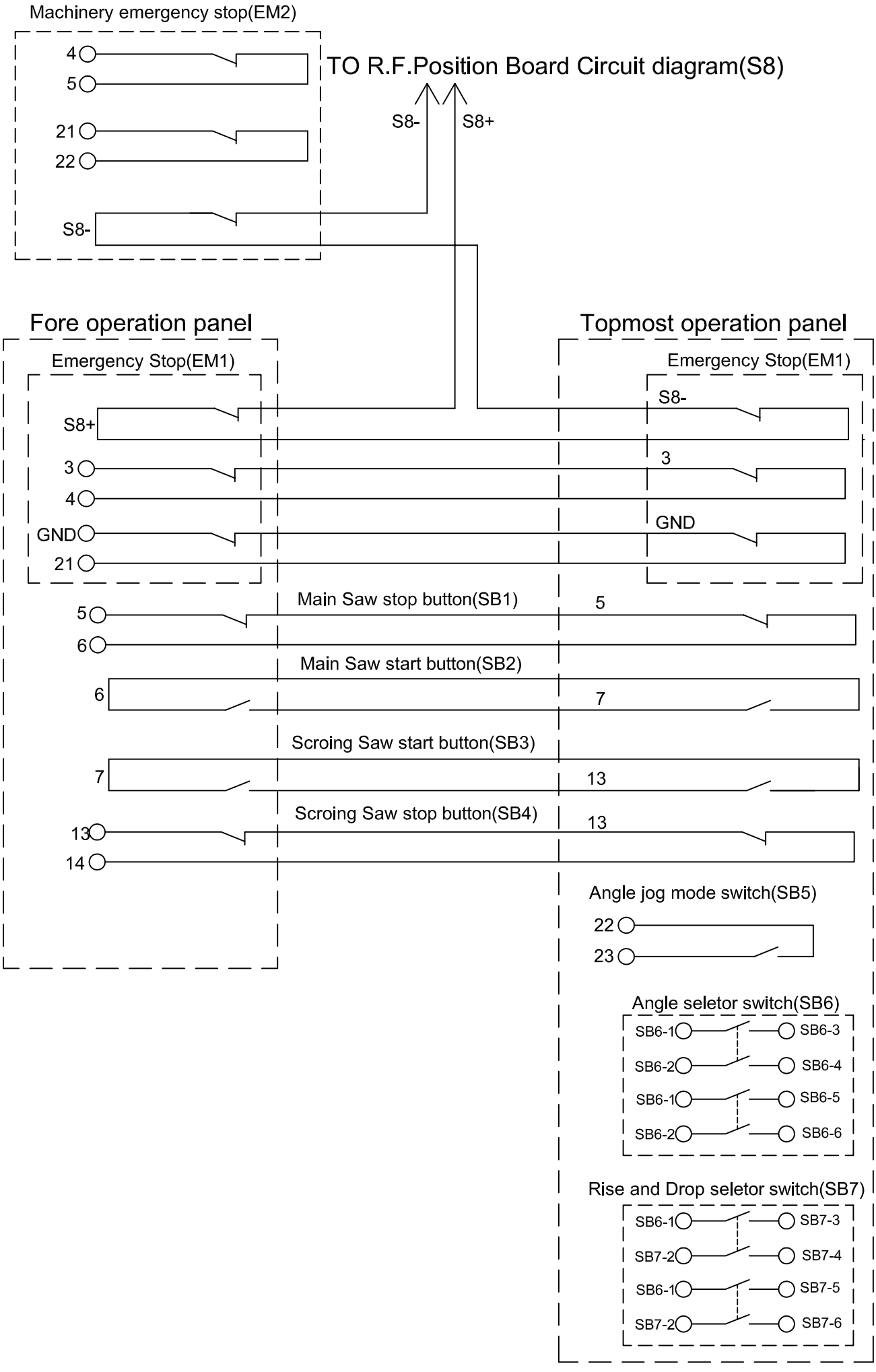


SS-D405A3 CE R.F.Position Board Circuit diagram



V1.0

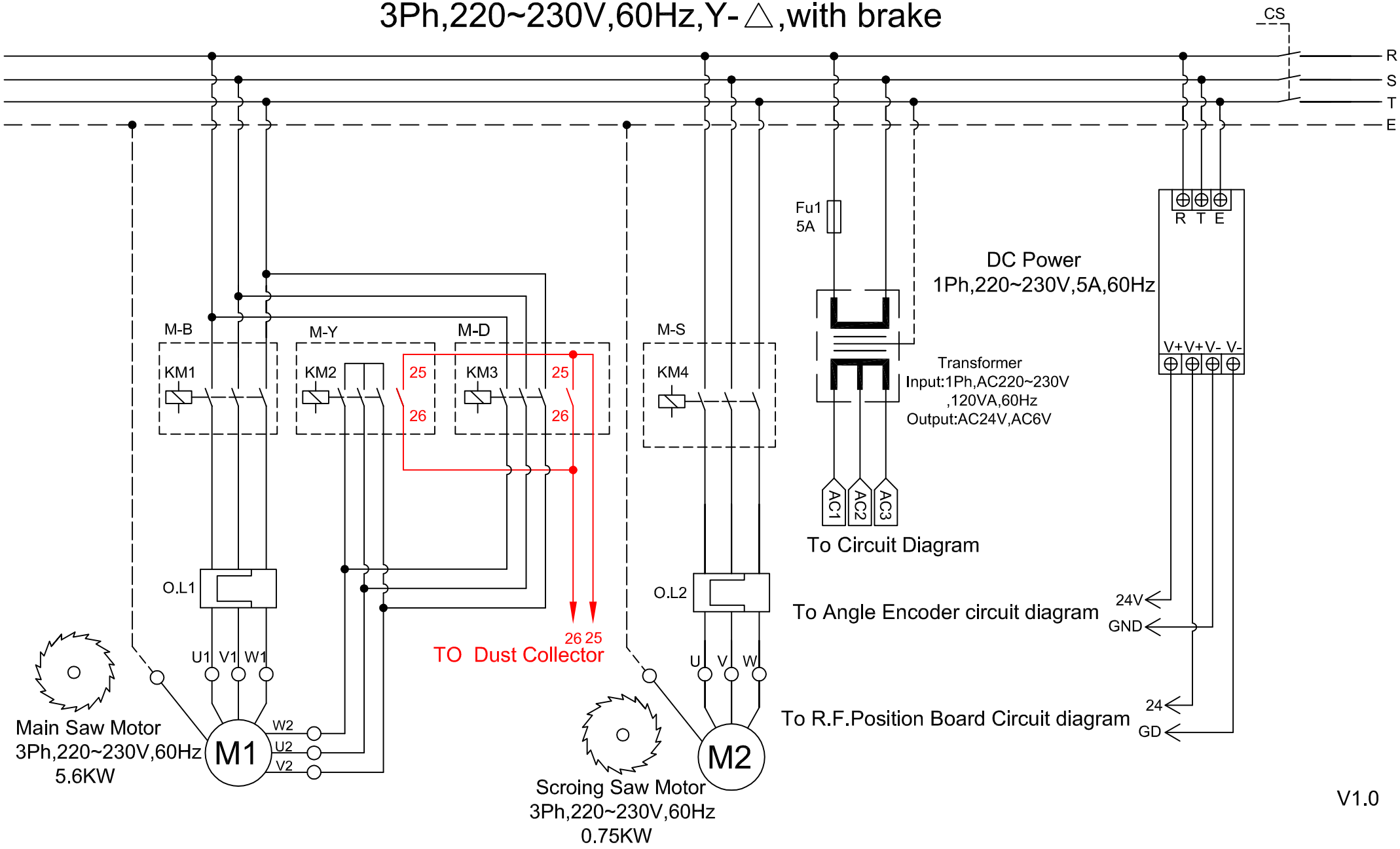
SS-D405A3 CE Operation panel



V1.0

SS-D405A3 CSA The main control circuit

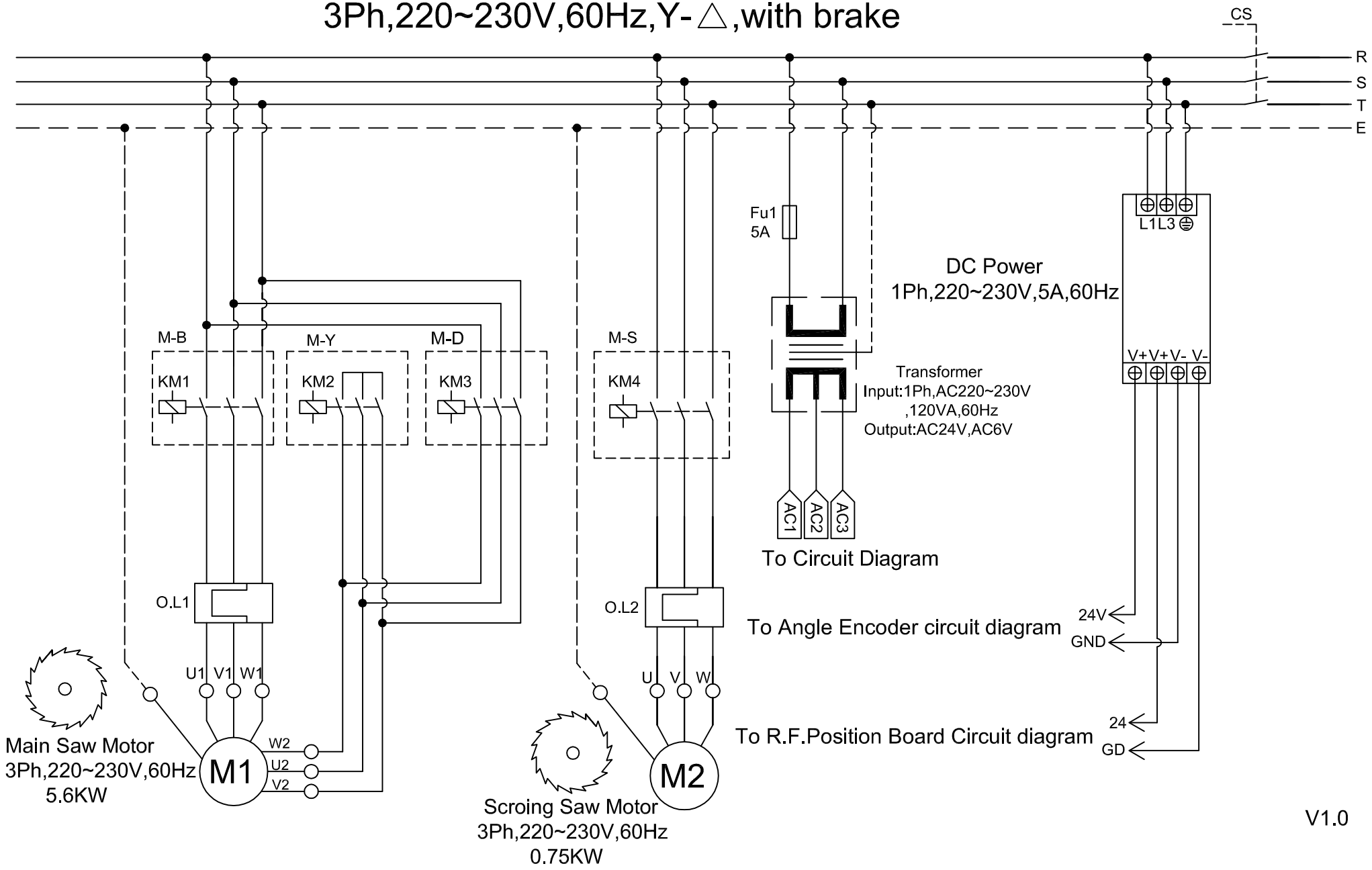
3Ph,220~230V,60Hz,Y-△,with brake



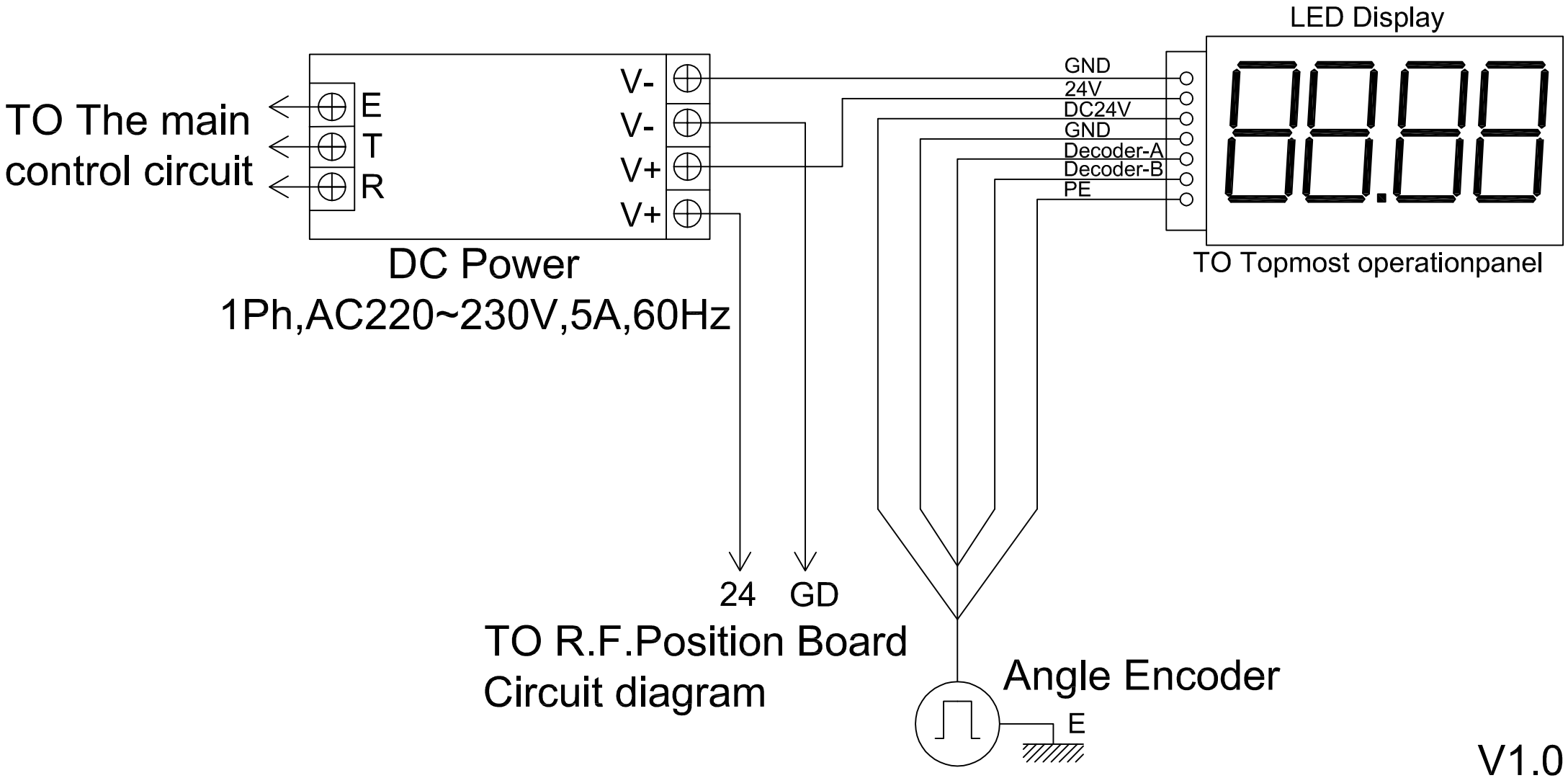
V1.0

SS-D405A3 CSA The main control circuit

3Ph,220~230V,60Hz,Y-△,with brake



SS-D405A3 CSA Angle Encoder circuit diagram



V1.0

SS-D405A3 CSA Circuit Diagram

3Ph,220~230V,60Hz,Y-△,with brake

RA1	Relay1(jog mode)	SB7	Rise and Drop seletor switch(DC motor)
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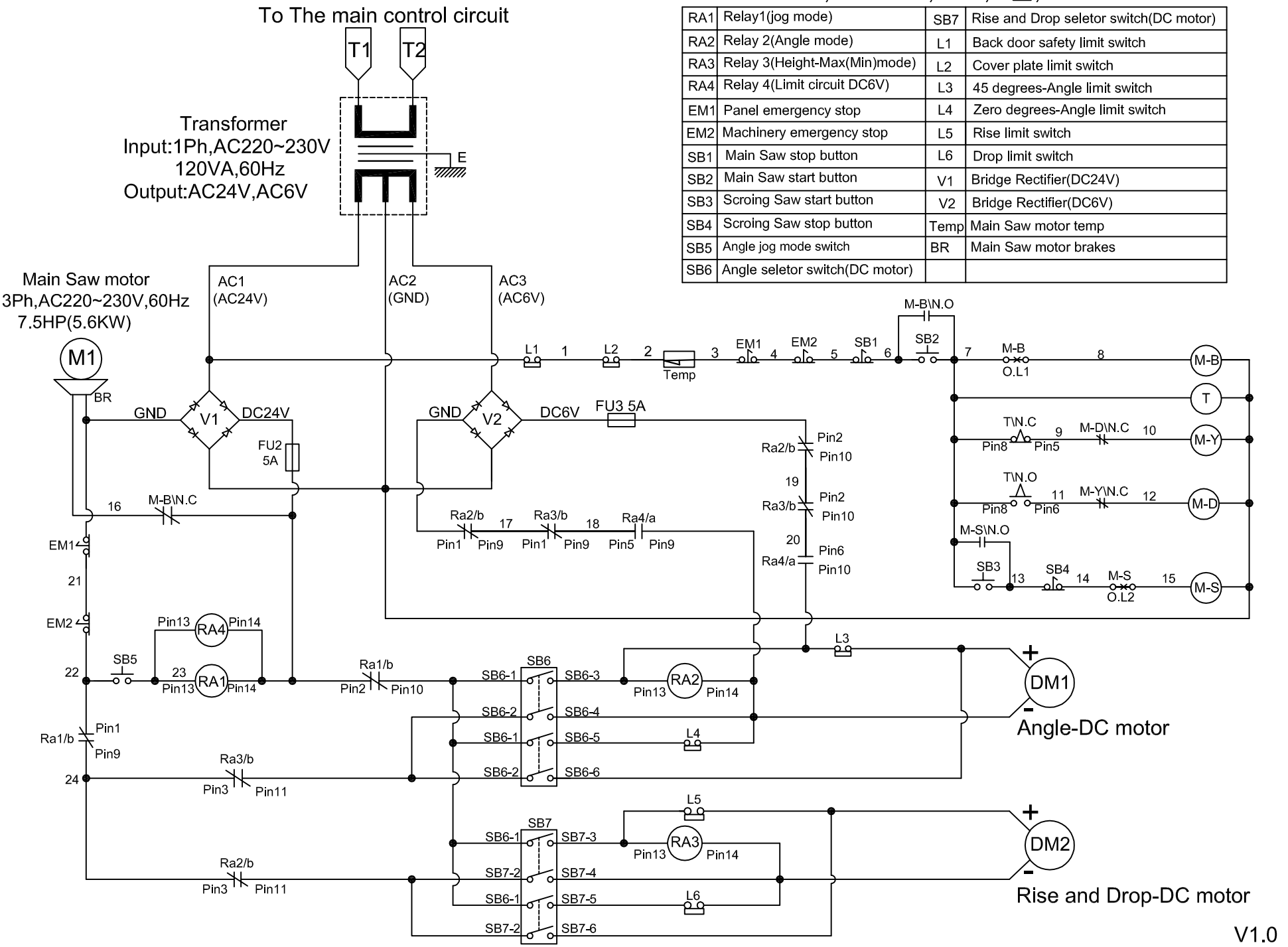
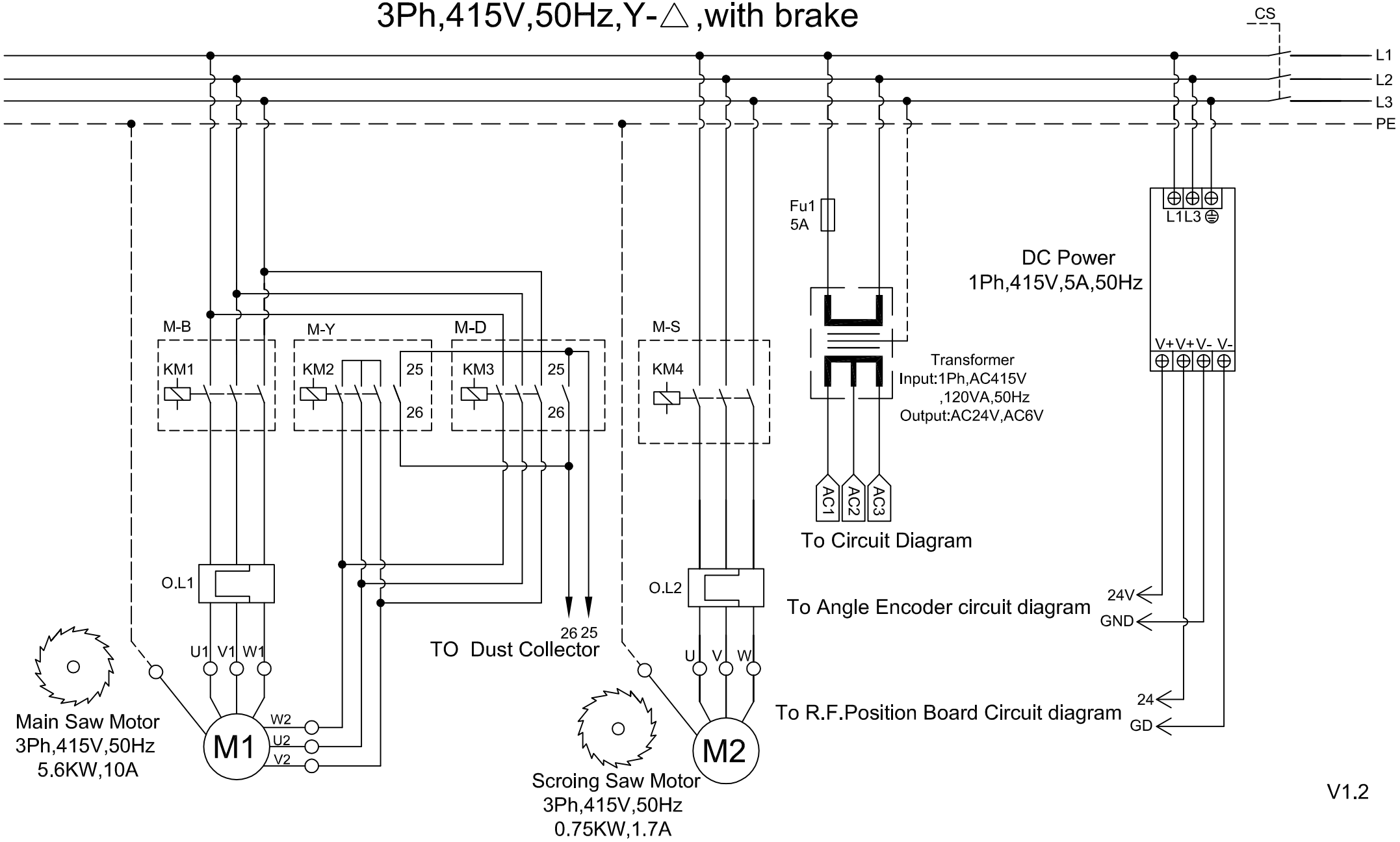
RA4	Relay 4(Limit circuit DC6V)	L3	45 degrees-Angle limit switch
EM1	Panel emergency stop	L4	Zero degrees-Angle limit switch
EM2	Machinery emergency stop	L5	Rise limit switch
SB1	Main Saw stop button	L6	Drop limit switch
SB2	Main Saw start button	V1	Bridge Rectifier(DC24V)
SB3	Scroing Saw start button	V2	Bridge Rectifier(DC6V)
SB4	Scroing Saw stop button	Temp	Main Saw motor temp
SB5	Angle jog mode switch	BR	Main Saw motor brakes
SB6	Angle seletor switch(DC motor)		



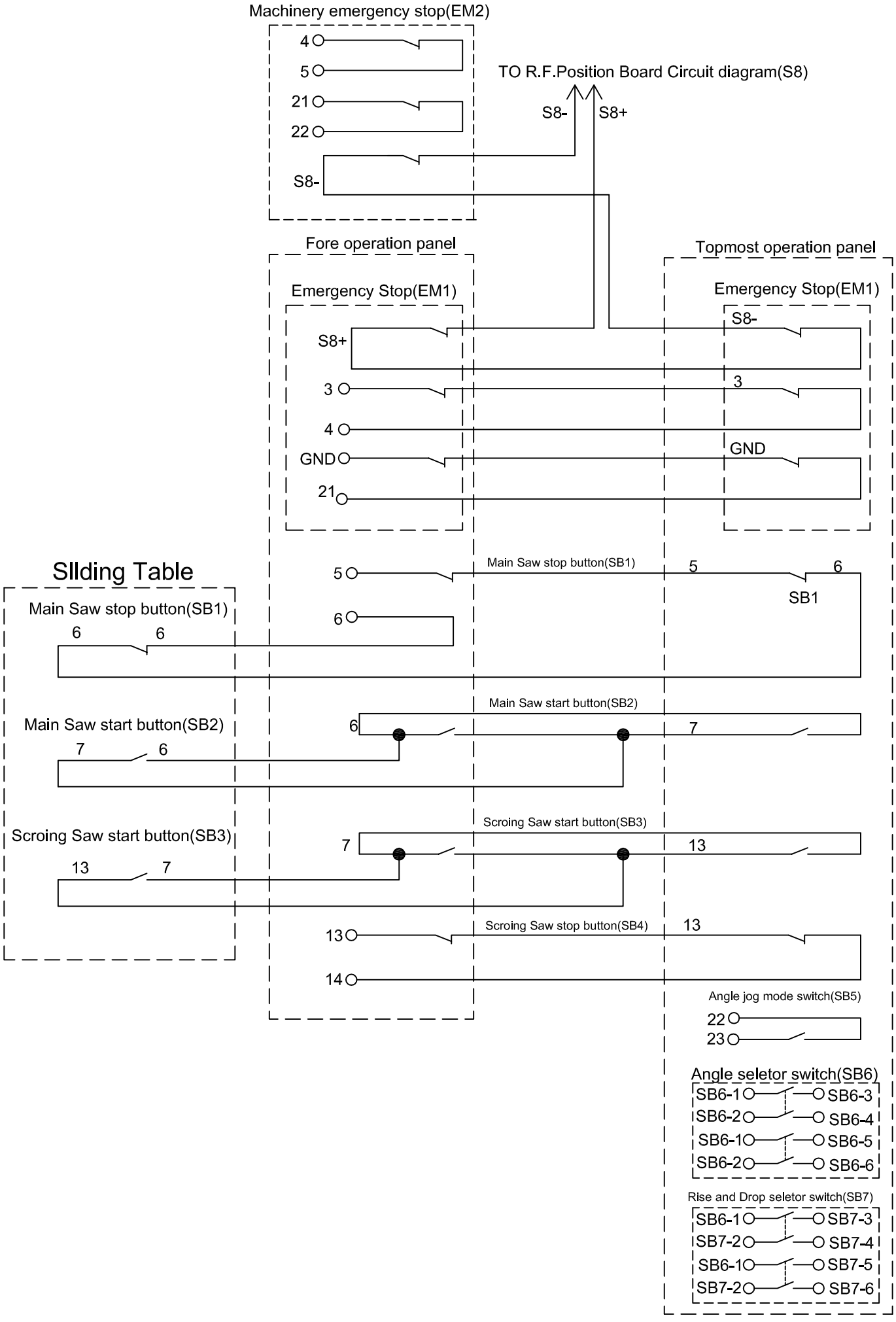
SS-D405A3 CE The main control circuit

3Ph,415V,50Hz,Y-△,with brake



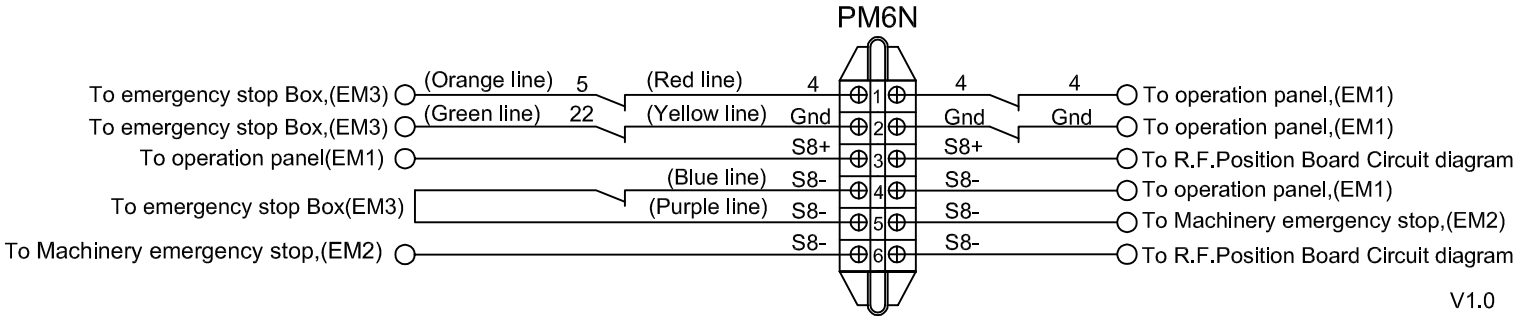
V1.2

SS-D405A3 CE Operation panel



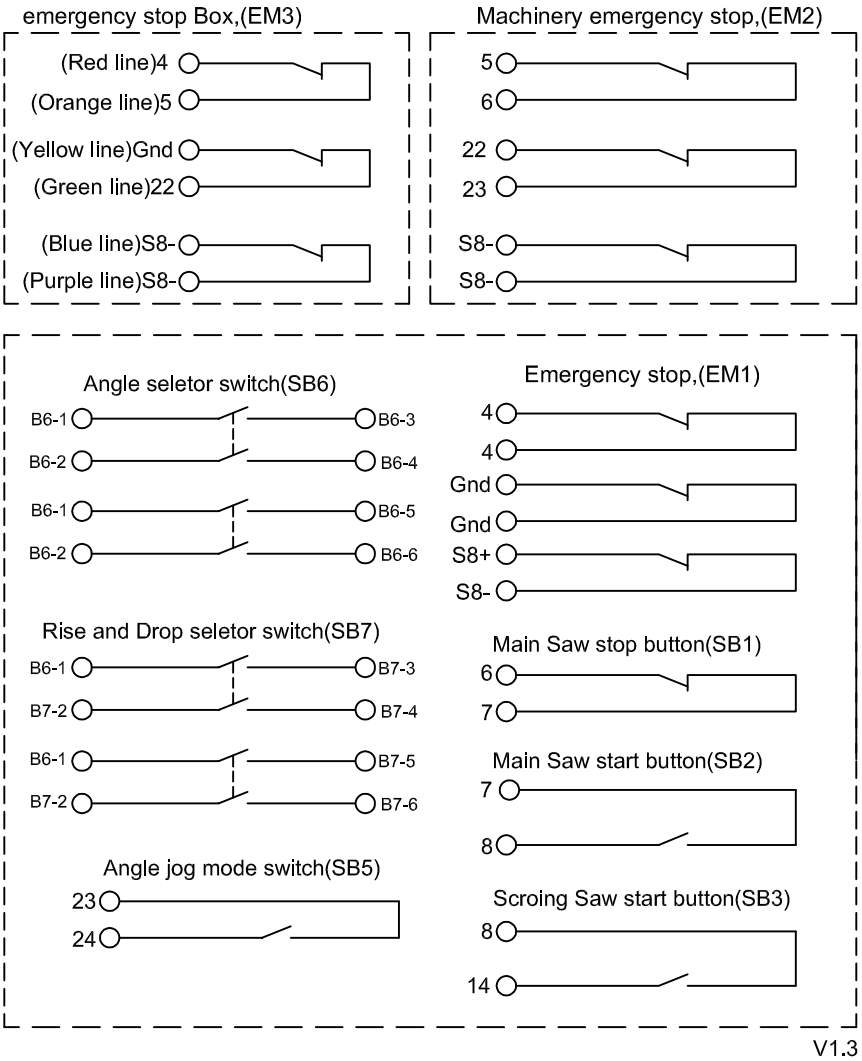
V1.2

SS-D405A3 CE Emergency stop Circuit Diagram



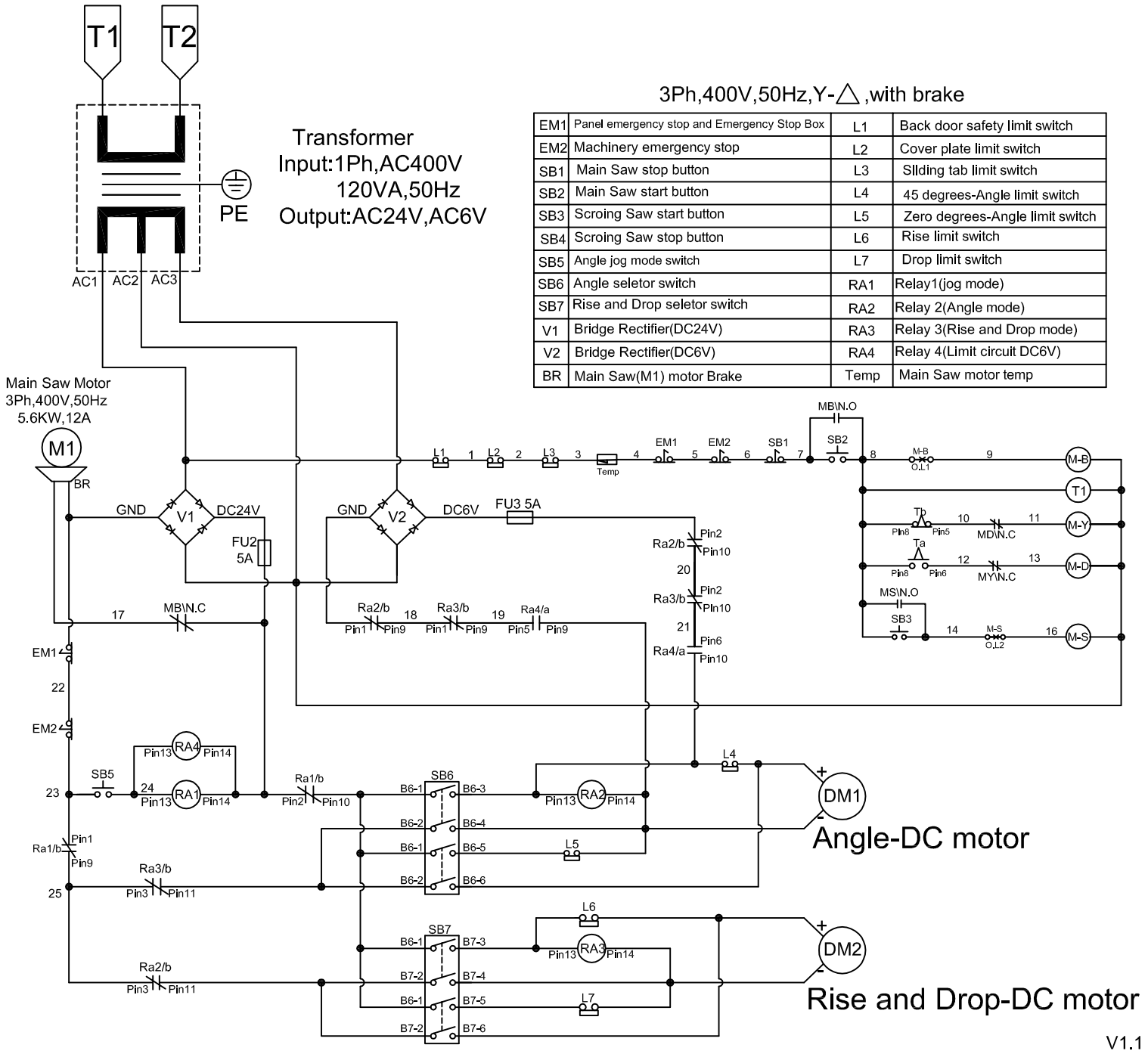
V1.0

SS- D405A3 CE Operation panel



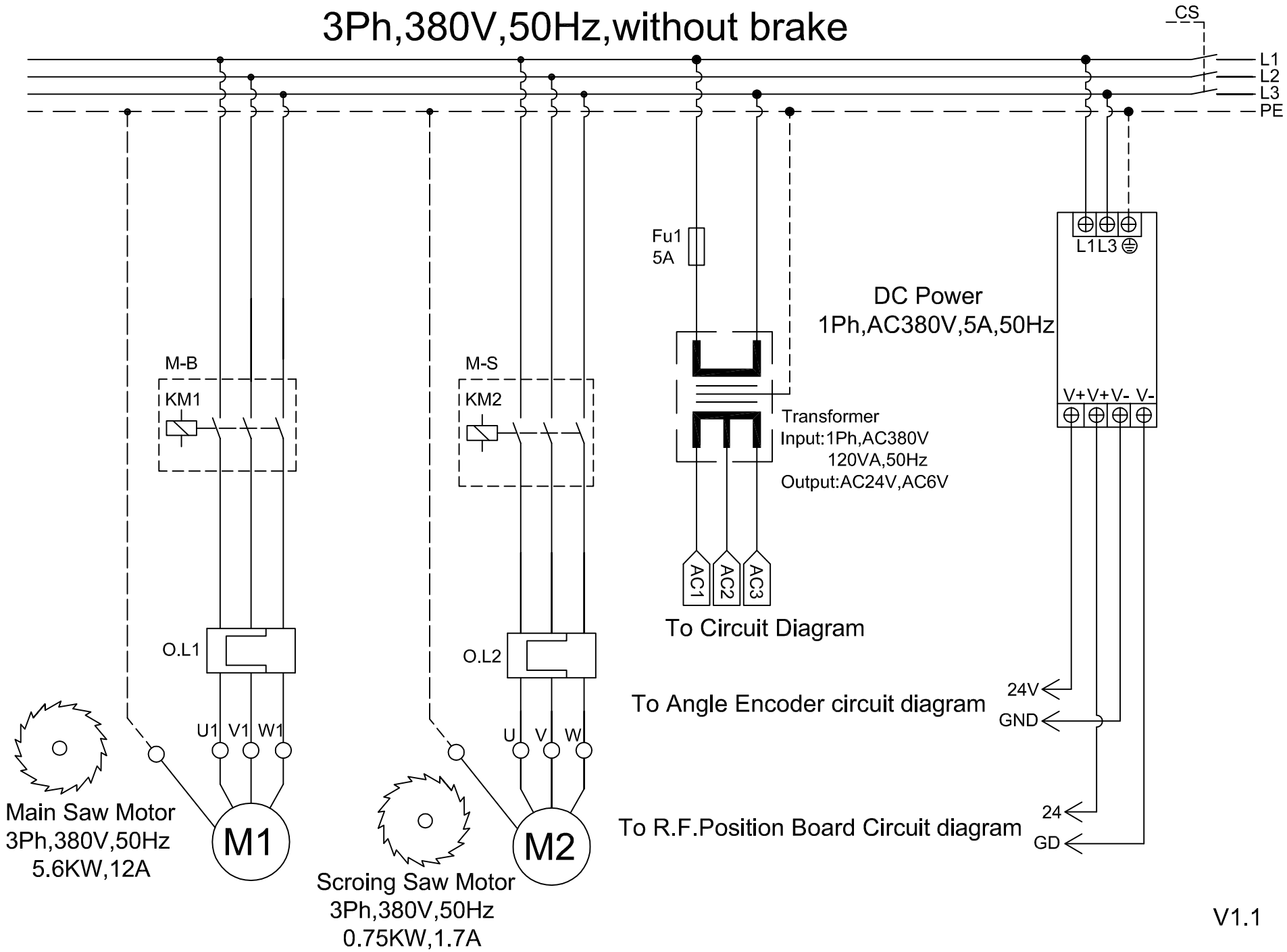
V1.3

SS-D405A3 CE Circuit Diagram



V1.1

SS-D405A3 CE The main control circuit

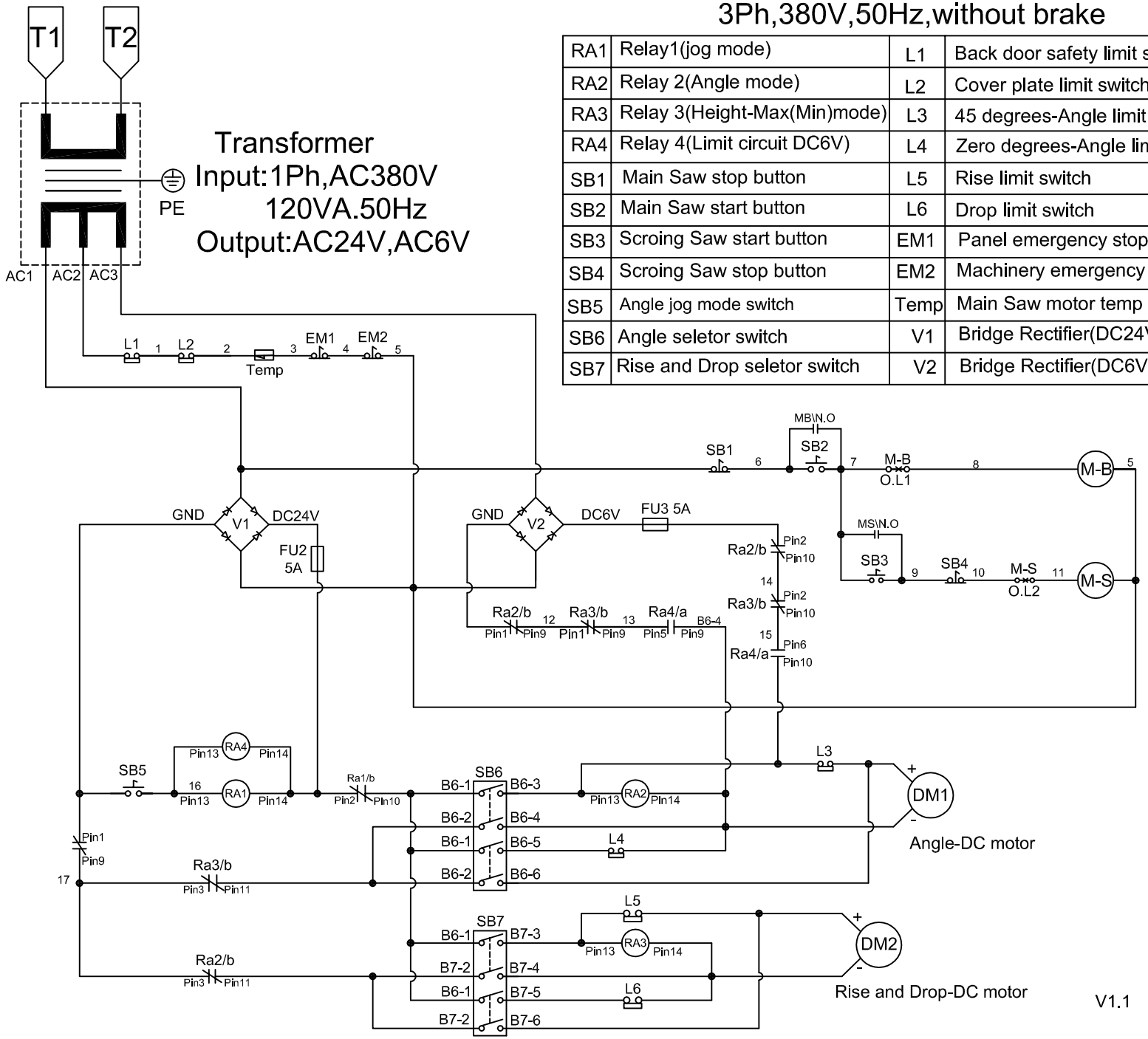


SS-D405A3 CE Circuit Diagram

To The main control circuit

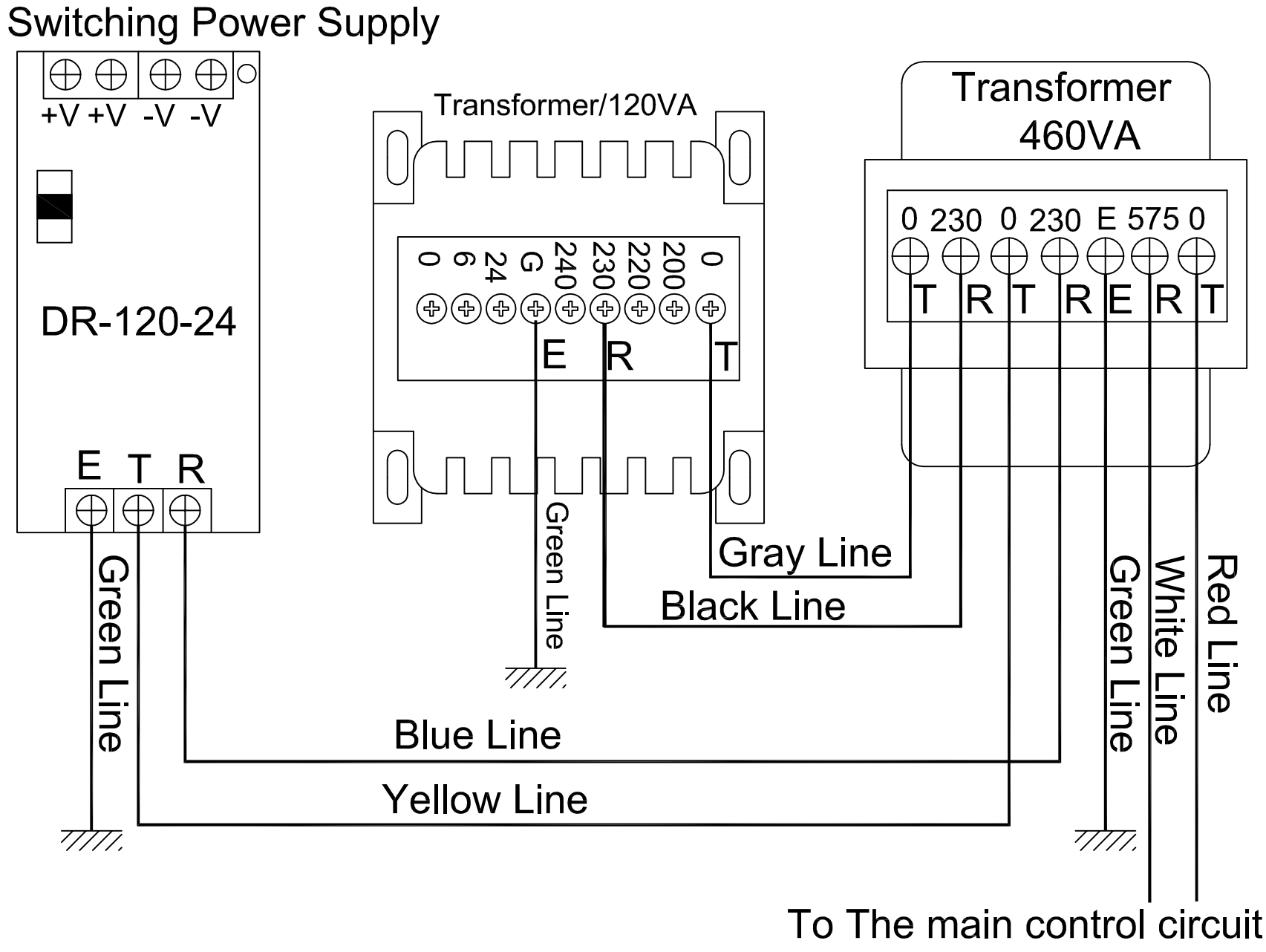
3Ph,380V,50Hz,without brake

RA1	Relay1(jog mode)	L1	Back door safety limit switch
RA2	Relay 2(Angle mode)	L2	Cover plate limit switch
RA3	Relay 3(Height-Max(Min)mode)	L3	45 degrees-Angle limit switch
RA4	Relay 4(Limit circuit DC6V)	L4	Zero degrees-Angle limit switch
SB1	Main Saw stop button	L5	Rise limit switch
SB2	Main Saw start button	L6	Drop limit switch
SB3	Scroing Saw start button	EM1	Panel emergency stop
SB4	Scroing Saw stop button	EM2	Machinery emergency stop
SB5	Angle jog mode switch	Temp	Main Saw motor temp
SB6	Angle seletor switch	V1	Bridge Rectifier(DC24V)
SB7	Rise and Drop seletor switch	V2	Bridge Rectifier(DC6V)



V1.1

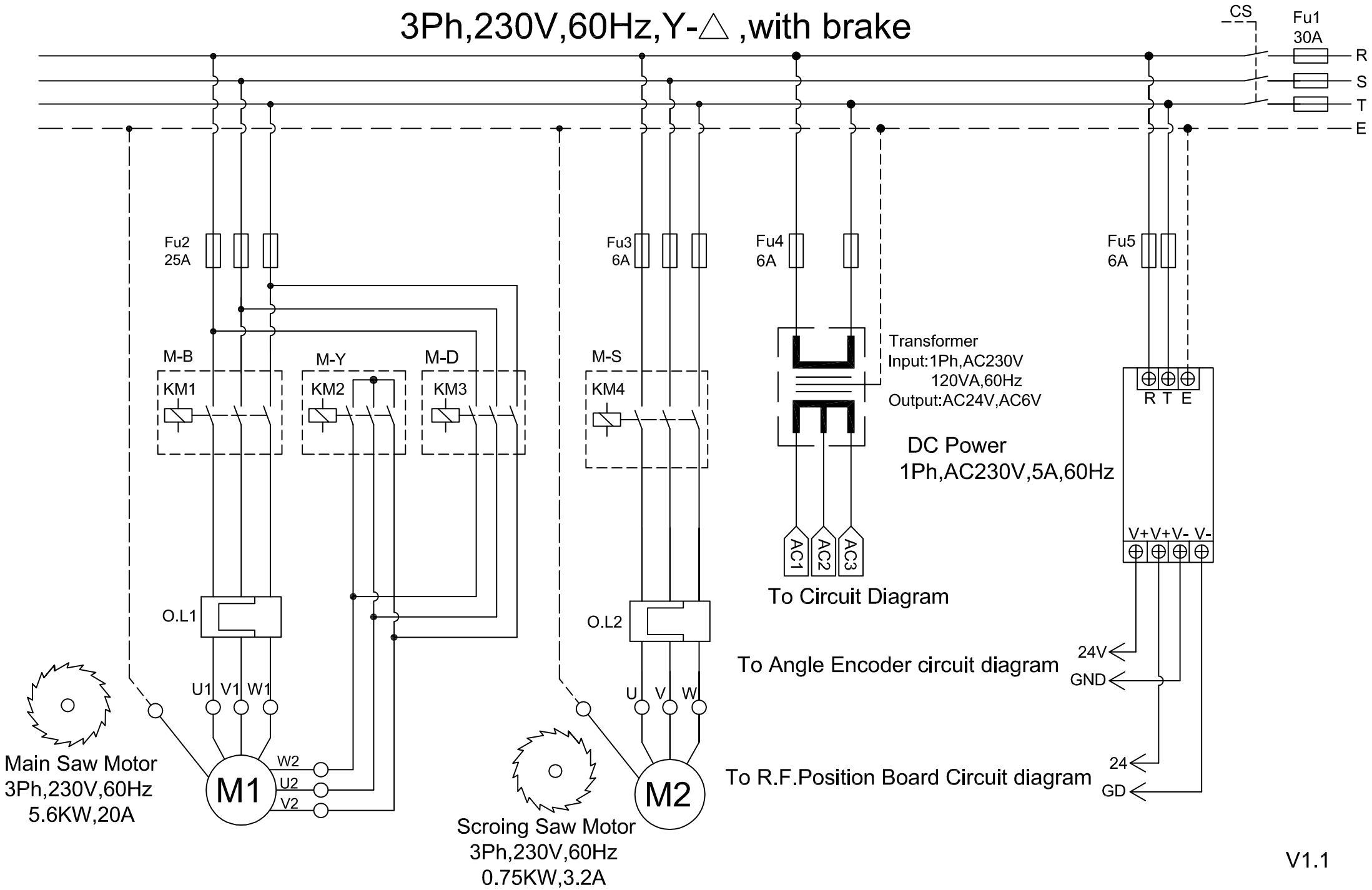
SS-D405A3 CSA Transformer Circuit (Input AC575V,OutputAC230V)



V1.2

SS-D405A3 CSA The main control circuit

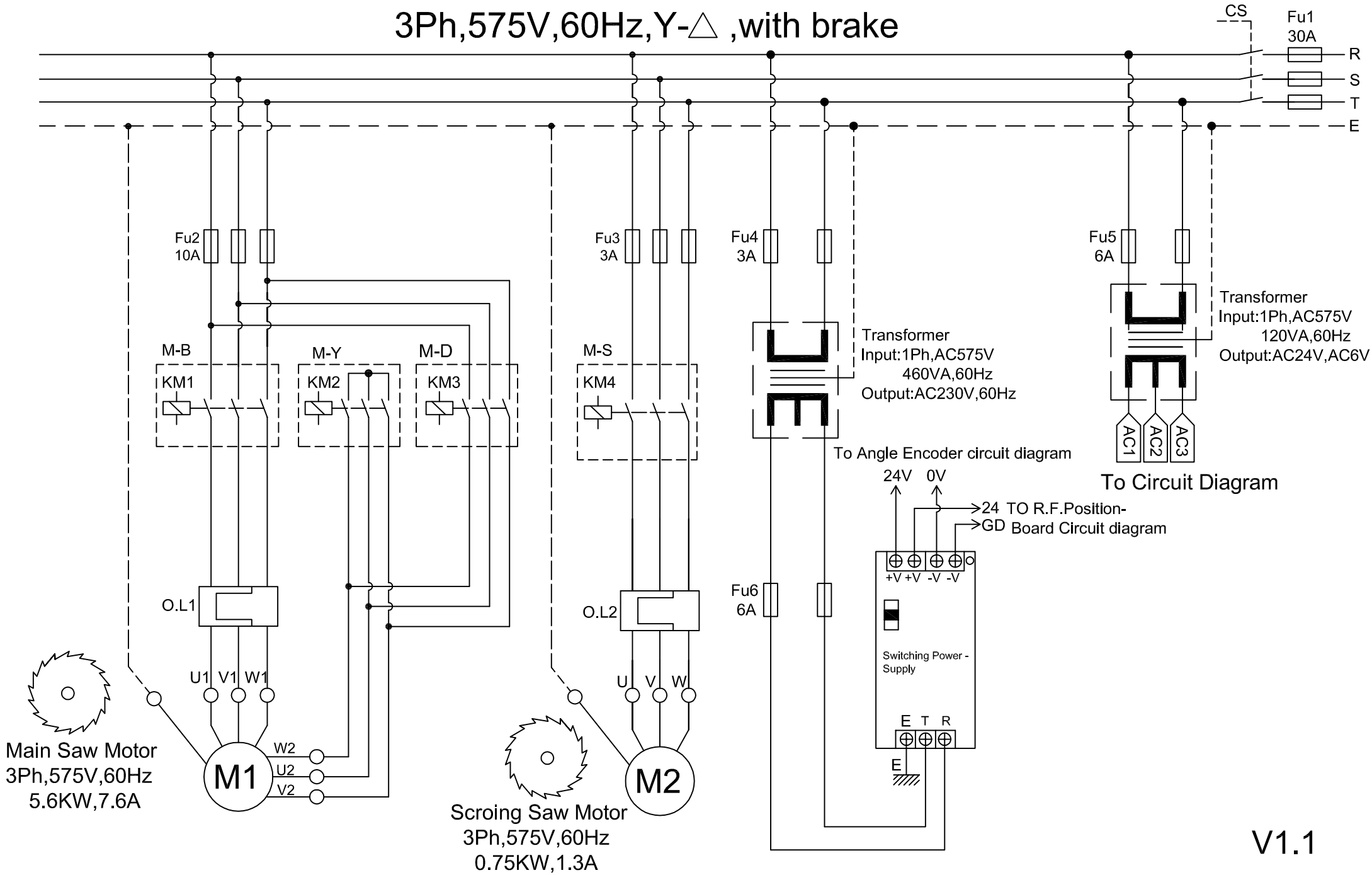
3Ph,230V,60Hz,Y-△ ,with brake



V1.1

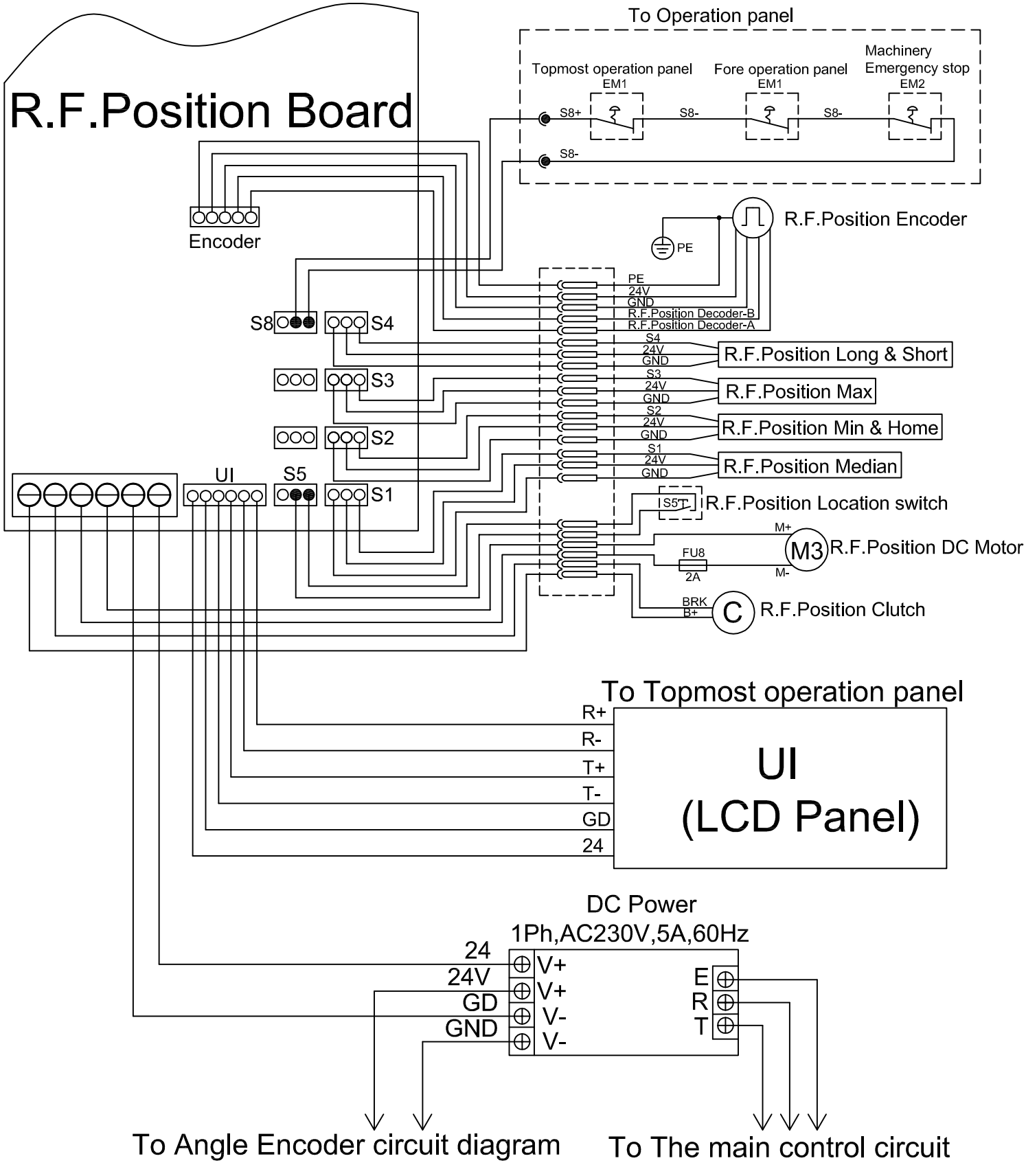
SS-D405A3 CSA The main control circuit

3Ph,575V,60Hz,Y-△ ,with brake



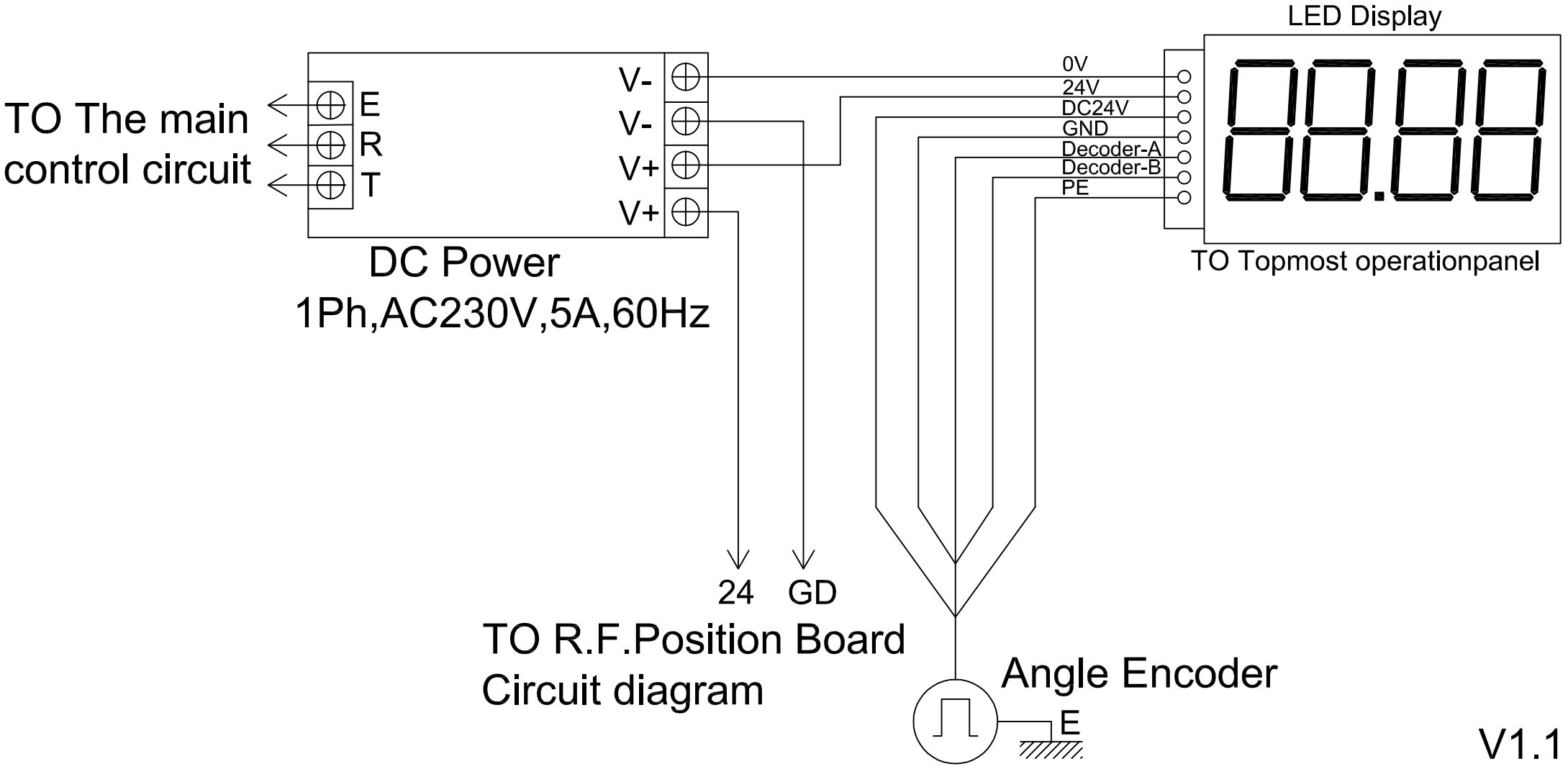
V1.1

SS-D405A3 CSA R.F.Position Board Circuit diagram



V1.2

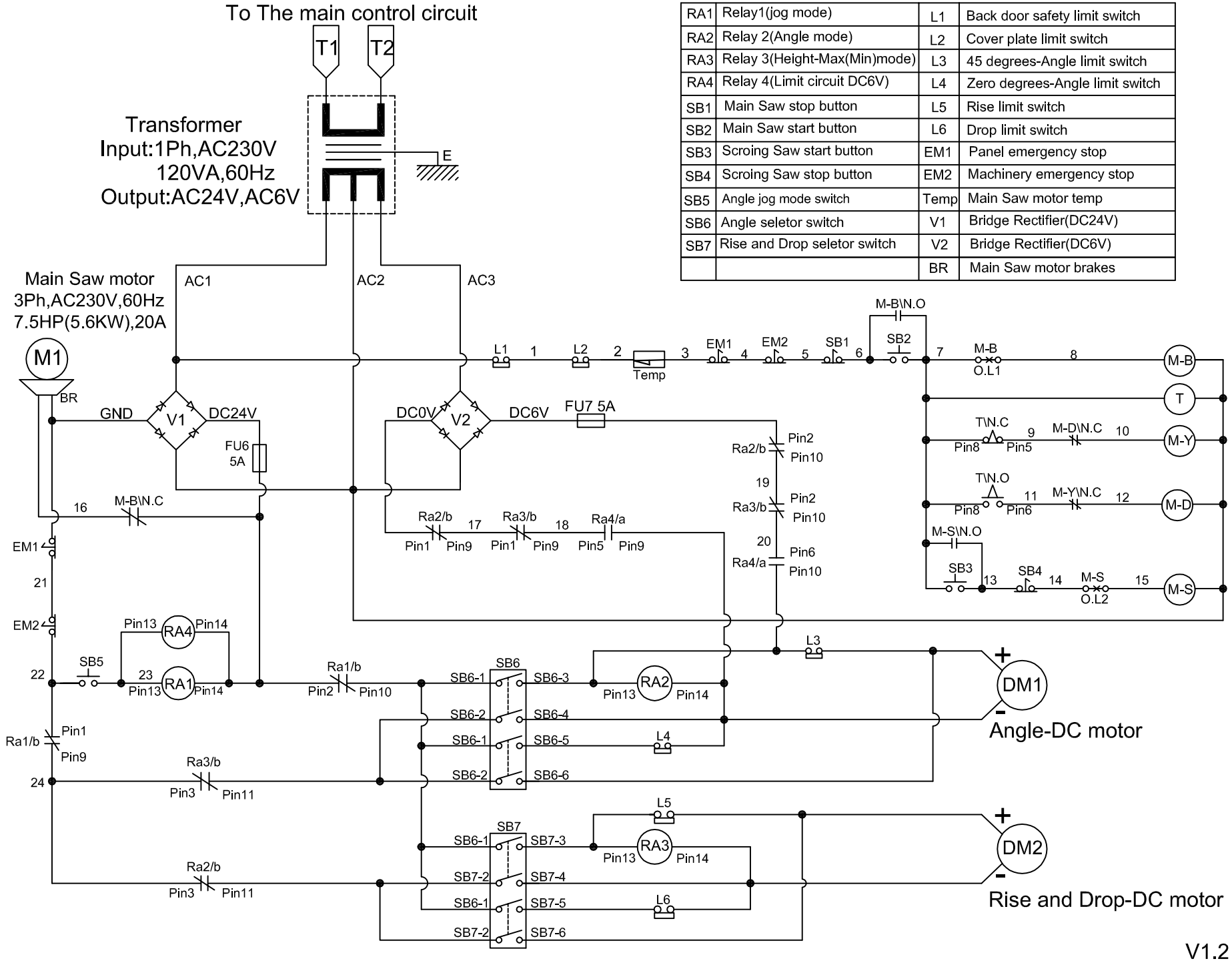
SS-D405A3 CSA Angle Encoder circuit diagram



SS-D405A3 CSA Circuit Diagram

3Ph,230V,60Hz,Y-△ ,with brake

RA1	Relay1(jog mode)	L1	Back door safety limit switch
RA2	Relay 2(Angle mode)	L2	Cover plate limit switch
RA3	Relay 3(Height-Max(Min)mode)	L3	45 degrees-Angle limit switch
RA4	Relay 4(Limit circuit DC6V)	L4	Zero degrees-Angle limit switch
SB1	Main Saw stop button	L5	Rise limit switch
SB2	Main Saw start button	L6	Drop limit switch
SB3	Scroing Saw start button	EM1	Panel emergency stop
SB4	Scroing Saw stop button	EM2	Machinery emergency stop
SB5	Angle jog mode switch	Temp	Main Saw motor temp
SB6	Angle seletor switch	V1	Bridge Rectifier(DC24V)
SB7	Rise and Drop seletor switch	V2	Bridge Rectifier(DC6V)
		BR	Main Saw motor brakes

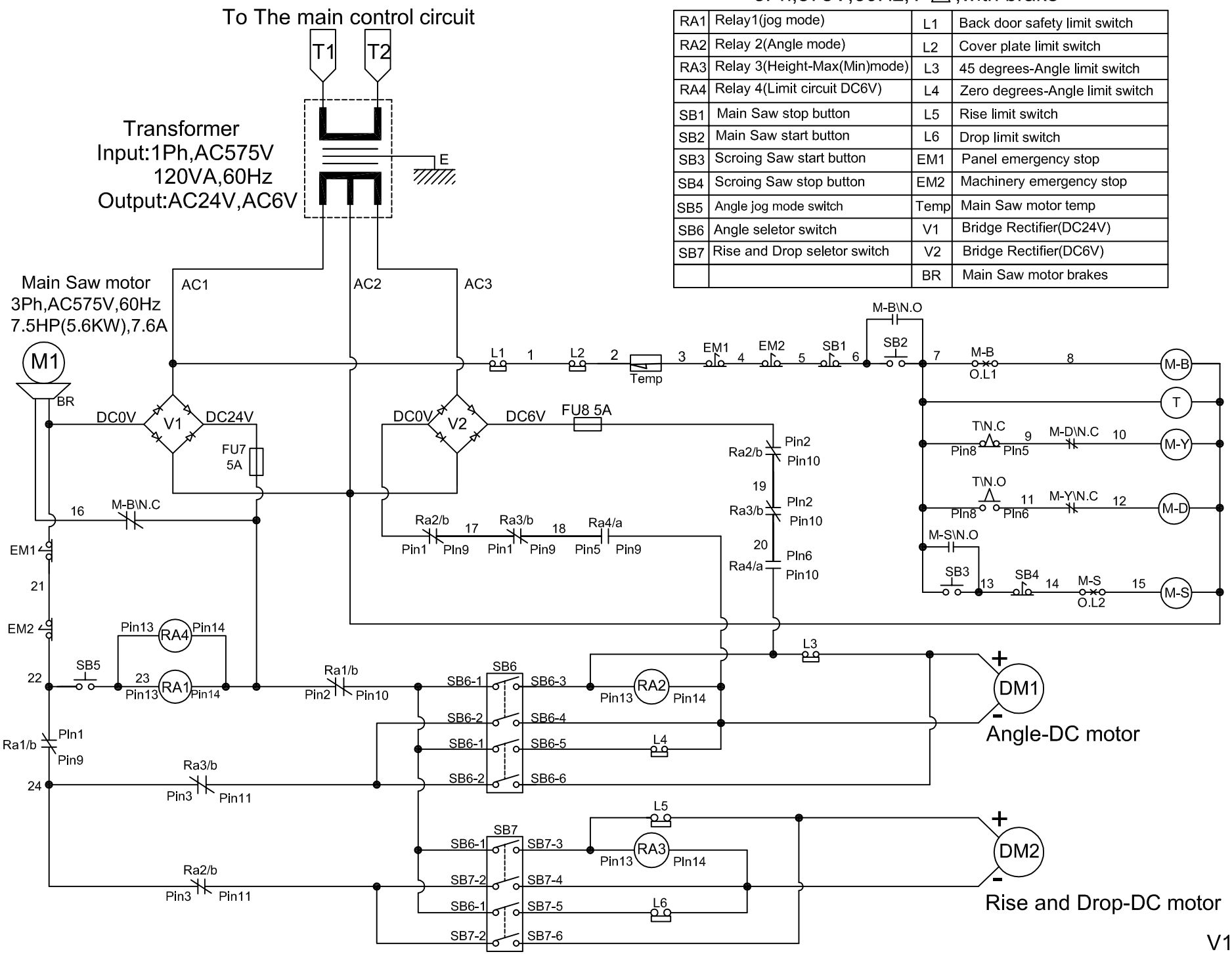


V1.2

SS-D405A3 CSACircuit Diagram

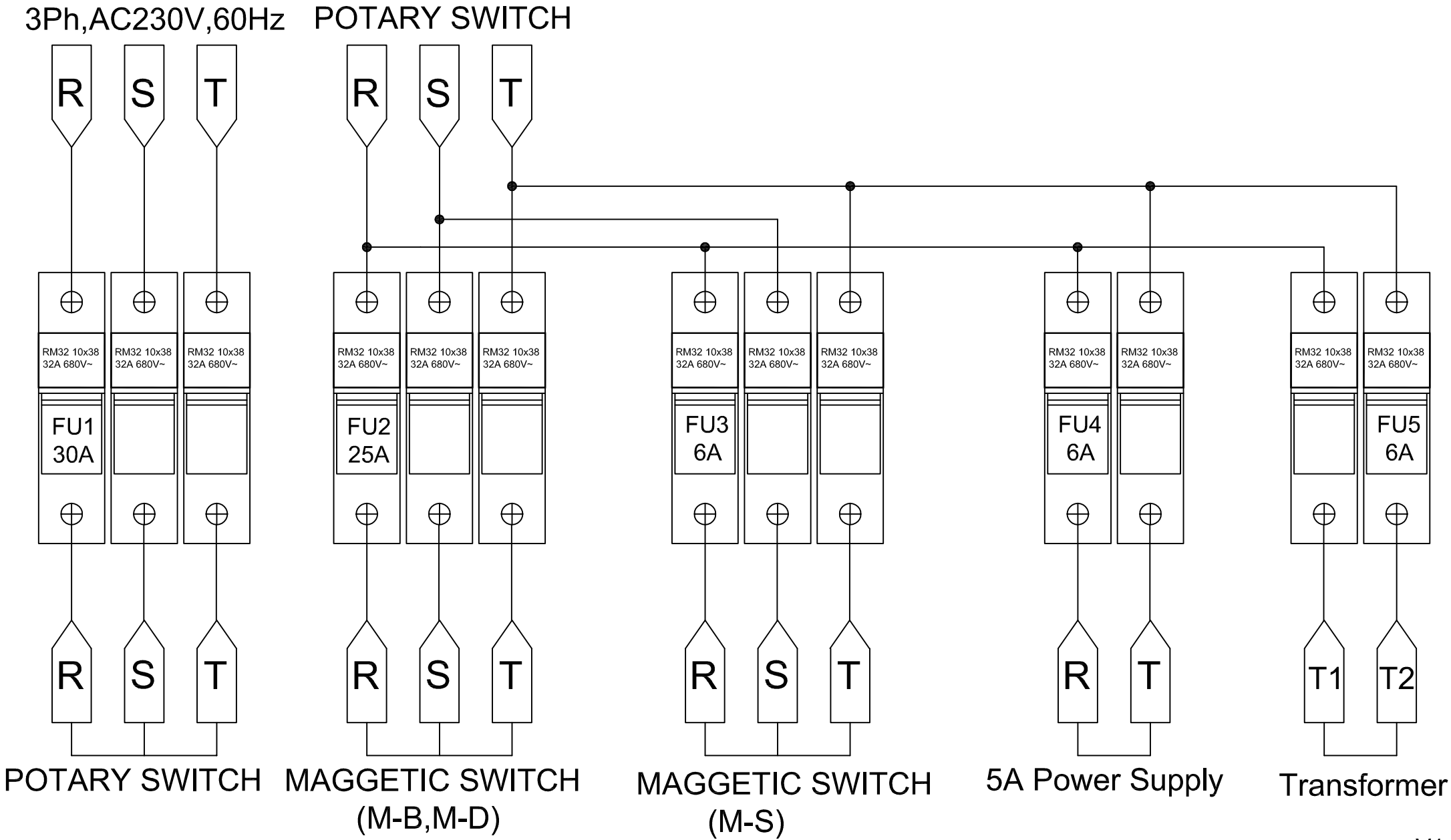
3Ph,575V,60Hz,Y-△,with brake

RA1	Relay1(jog mode)	L1	Back door safety limit switch
RA2	Relay 2(Angle mode)	L2	Cover plate limit switch
RA3	Relay 3(Height-Max(Min)mode)	L3	45 degrees-Angle limit switch
RA4	Relay 4(Limit circuit DC6V)	L4	Zero degrees-Angle limit switch
SB1	Main Saw stop button	L5	Rise limit switch
SB2	Main Saw start button	L6	Drop limit switch
SB3	Scroing Saw start button	EM1	Panel emergency stop
SB4	Scroing Saw stop button	EM2	Machinery emergency stop
SB5	Angle jog mode switch	Temp	Main Saw motor temp
SB6	Angle seletor switch	V1	Bridge Rectifier(DC24V)
SB7	Rise and Drop seletor switch	V2	Bridge Rectifier(DC6V)
		BR	Main Saw motor brakes



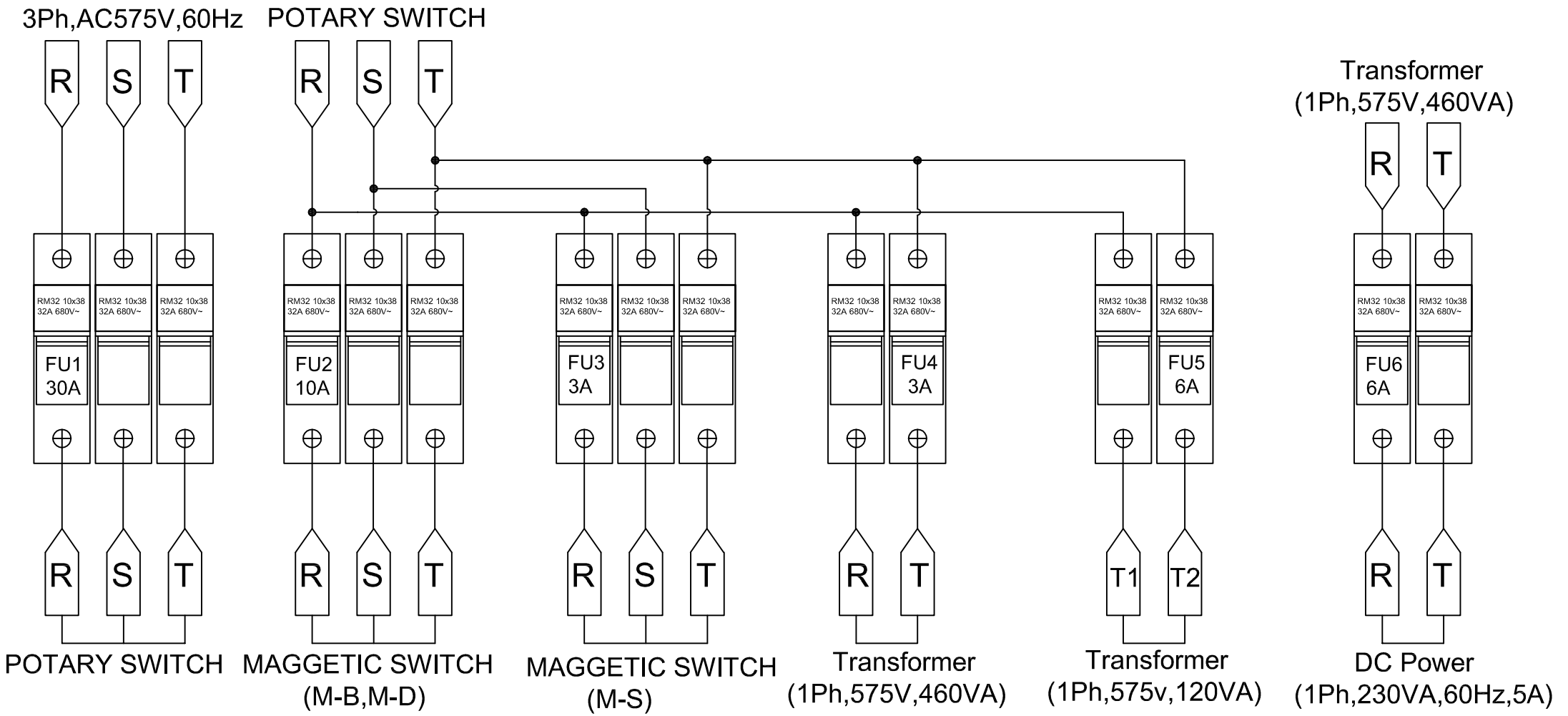
V1.1

SS-D405A3 CSA Ceramic Tube Fuse



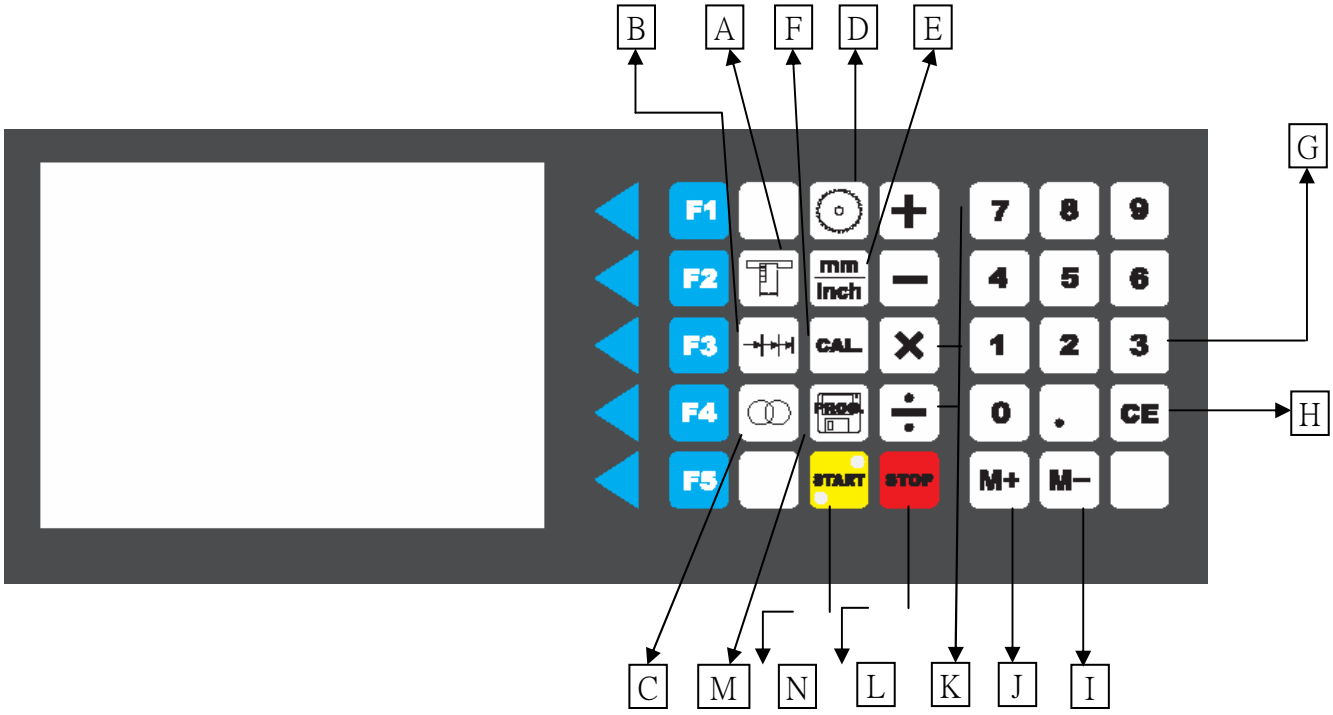
V1.0

SS-D405A3 CSA Ceramic Tube Fuse



V1.1

Operation Manual for Automatic Rip Fence (Optional)



A. Grooves /concealed cuts Function
B. Incremental dimension Function
C. Dimension repeat Function
D. Blade management
E. Switch mm/inch Function.
F. Calibration Function
G. Numeral Keypad
H. CE Key, erase function to delete the input.
I. M- Function, for tiny adjustment "decrease" 0.1mm /0.01inch
J. M+ Function, for tiny adjustment "increase" 0.1mm /0.01inch
K. For basic calculation , plus , minus, times, divide function.
L. Stop Key, stop the movement.
M. Program function
N. Start Key, start the movement.

*****Important**********
Any emergency situation during operation you can press Emergency stop to stop immediately.
The rip fence travel distance from 5mm to 1350mm, safety set up sensor at 400mm.
If the travel distance set at 300mm, it will stop at 400mm first , press start key continually to reach 300mm
Before function, measure the width of a cut test piece with calipers, check the accurate before operation.
Ex. After cut test, the work piece is 901mm/the screen showed 900mm

Press the CAL key

for more than 3 seconds,

after highlight appears in the dimension display, enter the measured dimension using the numeric keypad,
Press the CAL key for 3 second after input the correct information.
*when input the setting wrong , press the CE function to erase and re-input again.
*Noted, When rip fence moving do not stand in the travel distance to avoid crash by rip fence.

■ A. Grooves /concealed cuts

1. Press the "function key" to enter the starting position,
2. Ex. Input 600mm, press F2 input 600mm after height light appear press F2 again when finish
3. The groove width, Ex. 20mm, press F3 input 20mm after height light appear press F3 again when finish

**input positive number (greater than zero) : the rip fence move backward,
input negative number (less than zero) : the rip fence move forward (close to the blade side)

4.The groove depth, Ex. 55mm, press F4 input 55mm after height light appear press F4 again when finish
5. Select blade thickness, before that you need to input the blade information.

Please check down below the manual find the " blade management"

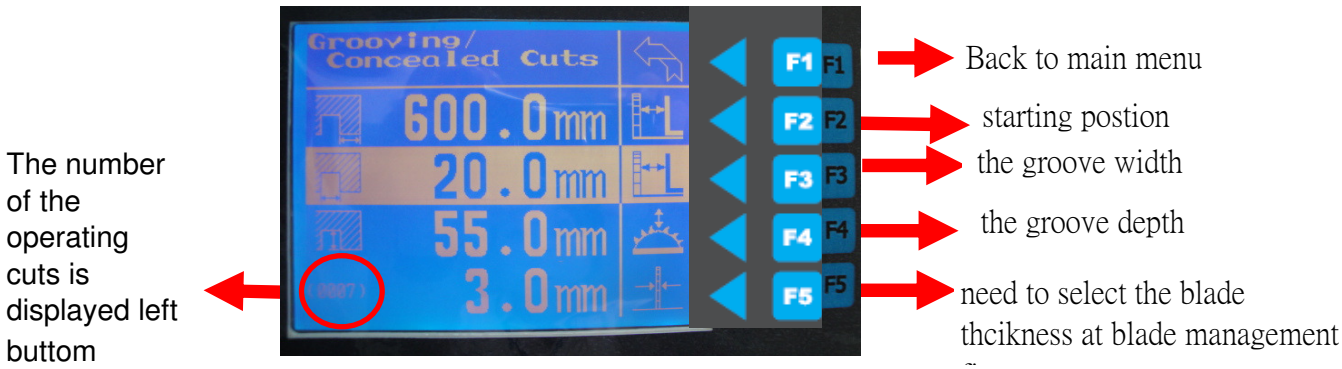
6. Press start key to start the function, the number of the operating cut will show on the screen
7. The start key must be pressed after every cuts
so that the rip fence is adjusted accordingly.
8. The number of cuts is displayed at the bottom left of the screen which will change after every cut.

* During input can press "CE" key to delete the data, press " stop key" to stop the input at any time.
* During operating you can press " stop key" to stop work and re-set up again or press F1 to main menu.

Important User need to check the height of the blade manually and input it.

***This PLC is only to control rip fence which can not adjust the blade height or tilting automatically.

Press F1 to back to main menu at the any time.



■ B. Incremental dimension

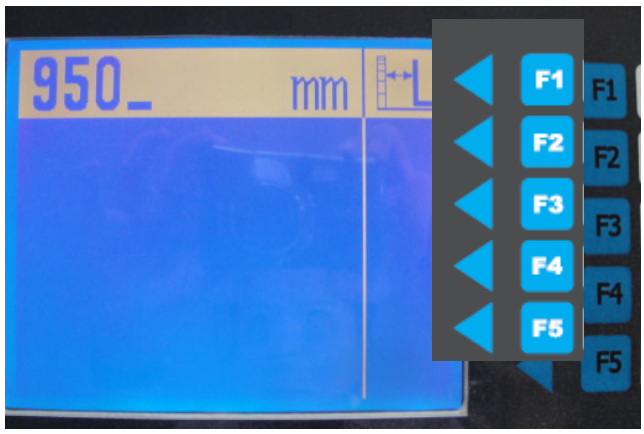
1. Press the function key to start the set up,
2. Press F2 to enter the starting position for the incremental dimension and then press F3 for step size.
(step size can be positive (move to right hand side) or negative (move to left hand side).

Ex. To set up starting position and 660mm, and incremental dimension for 30mm or (-50mm)
Press F2 input 660mm after height light appear press F2 again when finish
Press F3 input 30mm (-50mm) after height light appear press F3 again when finish
The start key must be pressed each time to move the rip fence.
Press F1 to back to main menu at the any time.

■ C. Dimension repeat

1. Press function key (the rip fence will memories the last two position if any)
2. Input the first position Ex. 600mm when highlight appears, press the start key to move and save the position,
3. Input the second position Ex. 960mm when highlight appears, press the start key to move and save the posit

Press function key twice or press function key and start key to move in between to position.
(**it can only repeat two position, you need to click function key than start key each time
or double click to travel in between two position).
Press F1 to back to main menu .

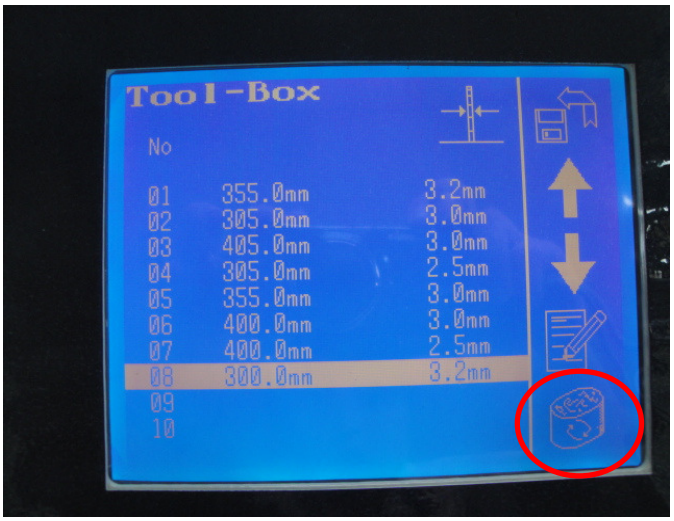


Direct press the numeral keypad to Input the database press start key to save

■ D. Blade management

1. Press the function key to input or edit the blade diameter and thickness.
2. Use F2/F3 to scroll up and down to select, Press F4 to amend or to create the new
3. After input blade data base press F1 to save memory and to back to main menu.
4. To edit the tool, press F2 to input blade dimension when highlight appear, press F2 again to save
5. Press F3 to input the thickness of the blade press F3 to save.

6. Press F5 to save the database you input , otherwise the information can not be record.

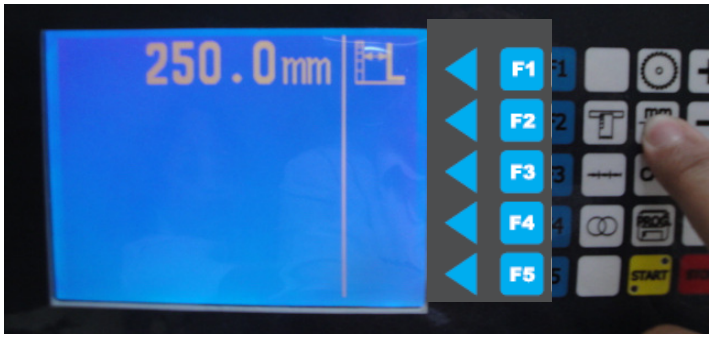


To delete the database from the blade information list you can press F5 for 3 sec, to delete (bin

7. Press F5 3 second to delete the database.
Press F1 to back to main menu .

■ E. mm/inch

Press the function key to switch to mm or inch.



■ F. Calibration

Measure the width of the cut test piece with calipers to check if the size match with the screen display.
Press the function key for more than 3 sec. ,after highlight appears in the dimension display.
Ex. If the cut piece measure size is 901 and screen show 900mm, after function key input 901mm to re-set.
Enter the measured dimension using the numeric keypad press the function key
For 3 sec. To confirm the input.
Press F1 to back to main menu .

■ M. Programs

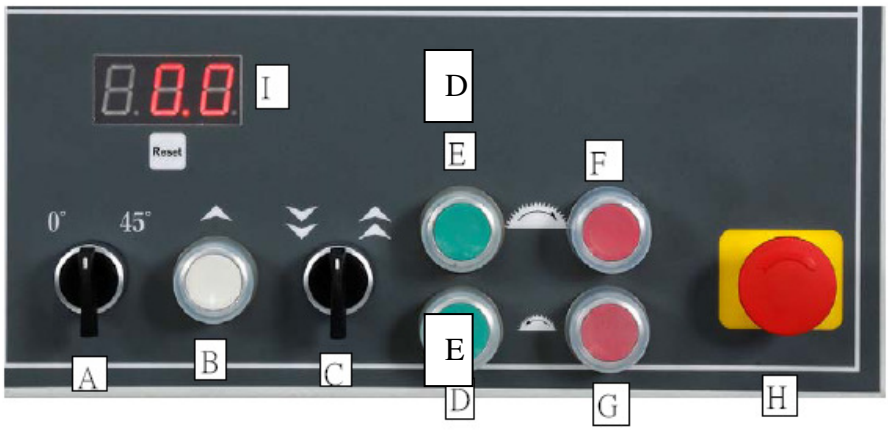
(this is a back up function, the data base right now only rip fence length can be move automatic, the rest can input but is manual, need to manual measure size and input the database
Press the function key. To select the different program. (can input 40 programs)
Press F4 to create new program, after create press F5 to save the database.
Press F2 to move to next input, press F3 to backward, Press F5 to save database.
Press F1 to back to main menu .

Trouble Shooting

Problem	Possible cause	Trouble shooting
The rip fence scale is not accurate	Possible the rip fence scale is out of calibration or was set up incorrect	Measure the exact size of the cut piece then Press the CAL key for more than 3 seconds to reset the correct input press CAL key for another 3 sec. to set
No Screen	Power did not connect properly	Check your power supplier , switch
The rip fence can not move (1)	Connection Problem or the parts been damage	Before find out the problem, can change to manual by press the bottom at the right hand size of the rip fence body to release the lock , can push the rip fence.
The rip fence can not move (2) the screen has highlight and flashing	Possible reason, the set up distance is less than the safety set up (to close to the blade less than 3 second) so it stop and flash	Press the bottom at the right hand side of the rip fence to release and move the rip fence manual backward out of the safety distance or press M+ key at the screen continually to let the rip fence move backward.
The rip fence can not move (3) the screen has highlight and flashing	Possible reason: the travel distance set up is more than 1350mm (max. travel distance)	Press the bottom at the right hand side of the rip fence to release and move the rip fence forward manually (back to the travel distance) or press M- key at the screen continually to let the rip fence move backward.

Control Panel Function Details

D405A with automatic rip fence



D405 with automatic rip fence

D405M with automatic rip fence

A. Turn the bottom to adjust the saw blade tilt automatic
B. For tiny adjustment to reach the exact angle, can only adjust increase (can only up, can not adjust decrease)
C. Main Saw blade up and down
D. To turn on the main saw blade
E. To turn on the scoring saw blade (scoring can be trun on when main saw blade is on)
F. To turn off the main saw blade (scoring blade will be off together)
G. To turn off the scoring saw blade (main blade will be off together)
H. Emergency stop
I. Saw blade swival angle display

Notice for Motorized Rip Fence when new machine assembled

Question: The fence works perfectly when you ask it to go from a small dimension to a larger one but when you ask it to go from a larger number to a smaller one the fence will not move until you hold down the start button.

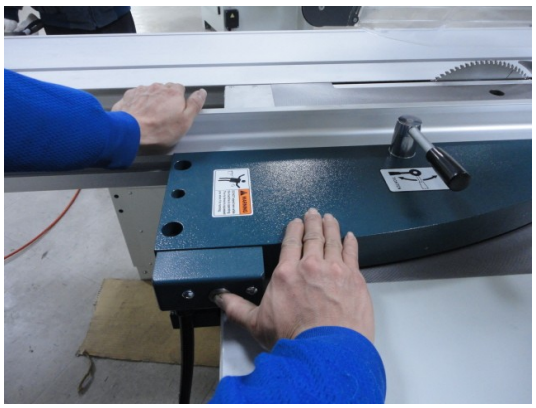
The reason： New machine or recently-used or a sudden power failure from lack of use of safety has been eliminated from the memory arising.

Solution: Front and rear limit switch contacts to complete a safety distance from the reading of Motorized Rip Fence regulations set

Practice: Use A OR B function can be set.

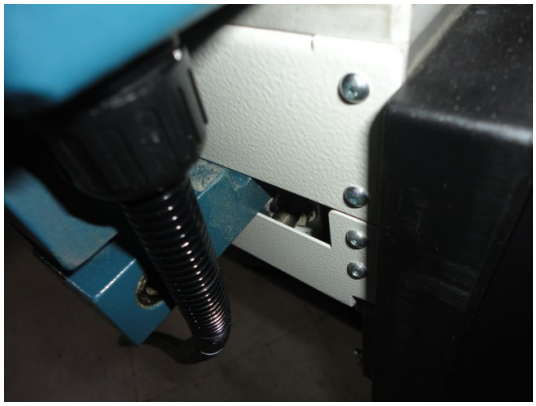
A. Use a washer (iron) to touch the fence of front and rear limit switch.

B. Press and hold the brake release button and push forward to reach the front limit switch.



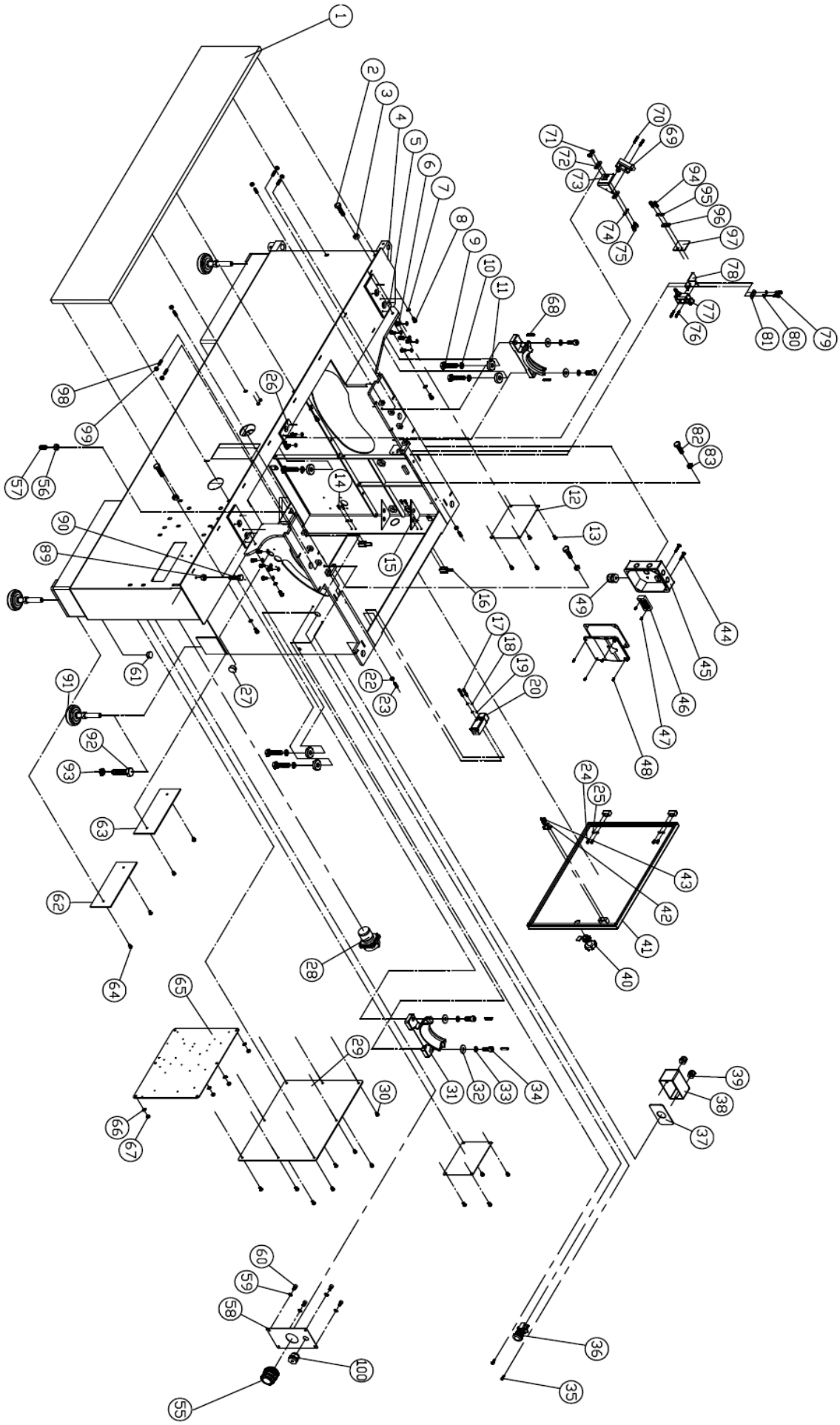
When touch the front limit switch the screen will be highlight.

Press and hold the brake release button and pull back to touch the rear limit switch.



When touch the rear limit switch the screen will be highlight.

After touch the front and the rear limit switch press and hold the brake release button and push forward to the middle position to finish.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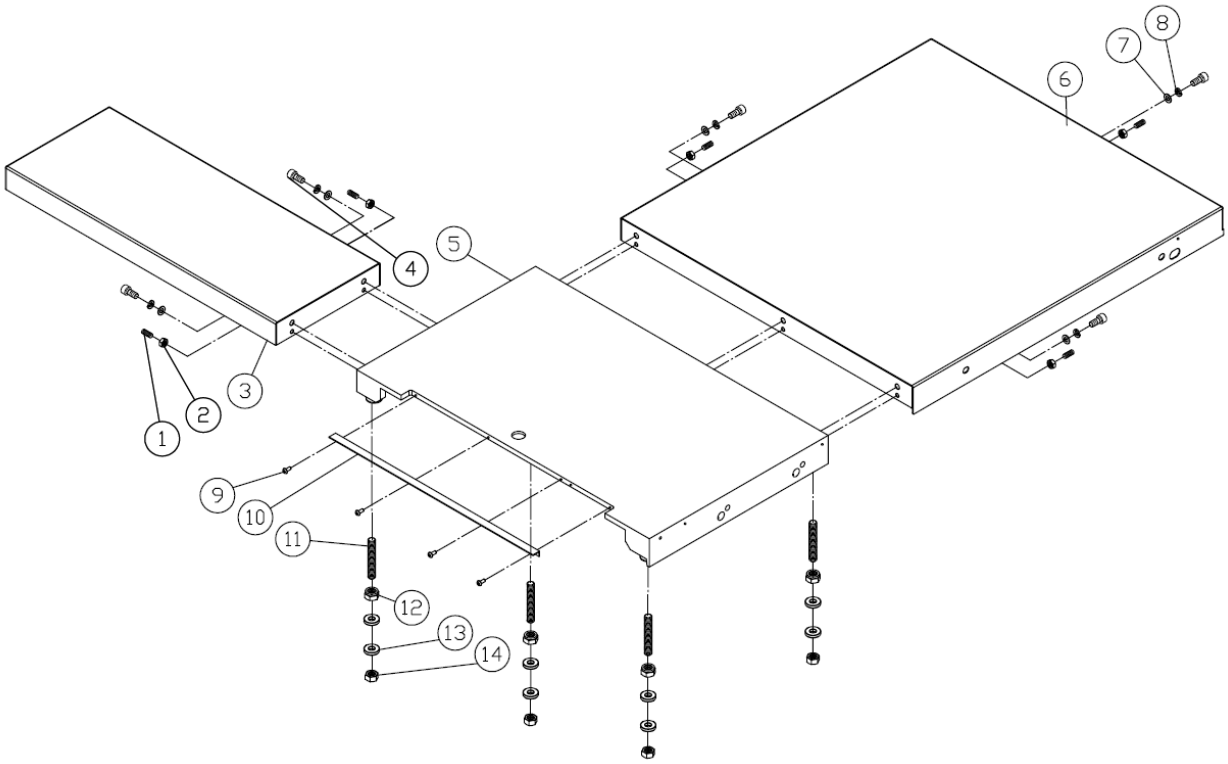
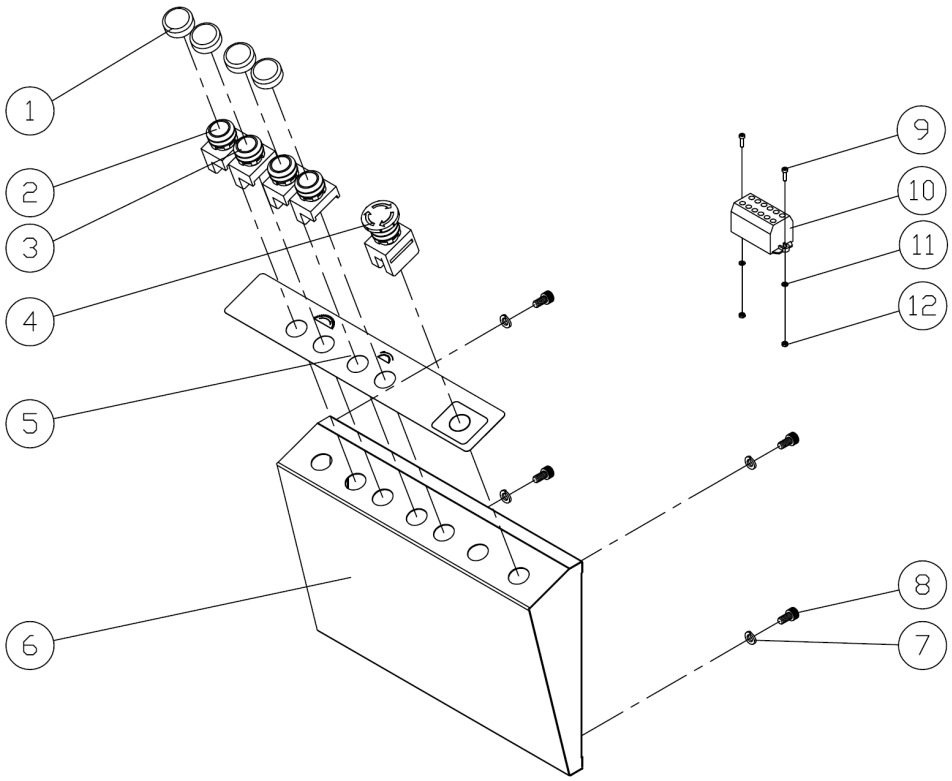
ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
1	207445	Plate	D405A	1	OPTIONAL
	207820	Plate	D405A3	1	OPTIONAL
2	SH100800	Hex Head Bolt	M10*40	2	
3	NH101700	Hex Nut	M10	2	
4	207835	Machine frame		1	R
5	205200-27	Plate		2	R
6	SR069300	Cap Screw	M6*12	12	
7	WS060000	Lock Washer	M6	18	
8	SR069400	Cap Screw	M6*16	6	
9	SH121000	Hex Head Bolt	M12*50	5	
10	WS120000	Lock Washer	M12	5	
11	203410	Ring		5	
12	207128	Plate		2	R
13	SJ069300	Button Head Screw	M6*12	8	
14	SR059300	Cap Screw	M5*12	4	
15	WS050000	Lock Washer	M5	4	
16	203412	Block		2	
17	SR040600	Cap Screw	M4*30	2	
18	WS040000	Lock Washer	M4	2	
19	WF040808	Washer	M4*ψ8	2	
20	136457	Door Safety Switch	AZD-S11	1	
22	NH081300	Hex Nut	M8	2	
23	SS080700	Set Screw	M8*35	2	
24	SR059200	Cap Screw	M5*8	4	
25	WS050000	Lock Washer	M5	4	
26	205200-28	Plate		1	R
27	201458	Hole Plugs	HP-22	6	
28	994809	Power Switch	ZH-HD-2	1	
29	207129	Operate Housing Cover		1	R
30	SJ060200	Button Head Screw	M6*10	8	
31	207540	Base		2	X2
32	WF102830	Washer	M10*ψ28	4	
33	WS100000	Lock Washer	M10	4	
34	SR100700	Cap Screw	M10*35	4	
35	ST050400	Tap Screw	M5*20	2	
36	994817	Emergency Stop Button	R2 PNR4-2B-R	1	
	994819	Emergency Stop Button	R2 PNR4-3B-R	1	
37	150956	Pad		1	
38	605408	Switch Box		1	
39	998621	Strain Relief		2	
40	203430	Lock		1	

ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
41	205259	Door		1	R
42	WS040000	Lock Washer	M4	2	
43	SP049300	Pan Head Screw	M4*12	2	
44	SJ060400	Button Head Screw	M6*20	2	
45	201105	Power Box	CE	1	CE
	201105A	Power Box		1	CSA
46	994805	Terminal	PB2504 4P	0	CE
	994805	Terminal	PB2504 4P	1	CSA
47	SP059200	Pan Head Screw	M5*8	2	
48	SJ059300	Button Head Screw	M5*12	4	
49	709421	Strain Relief	M20	2	
55	207749	Strain Relief	MGB50-39B	1	
56	NH101700	Hex Nut	M10	1	
57	207268	Set Screw	M10*50	1	
58	207748	Plate		1	T
59	WS060000	Lock Washer	M6	4	
60	SR069300	Cap Screw	M6*12	4	
61	201458	Hole Plugs	HP-22	1	
62	207299-32	Plate		1	R
63	207309-33	Plate		1	R
64	SF060200	Pan Head Screw(+)/W	M6*10	4	
65	207723	Plate	Y-Δ	1	Optional
	207149	Plate	W/O Y-Δ	1	Optional
66	WS060000	Lock Washer	M6	4	
67	NH061000	Hex Nut	M6	4	
68	PS062500	Spring Pin	ψ6*25	4	
69	205397A	Door Safety Switch	AZ7311	1	
70	SP040600	Pan Head Screw	M4*30	2	
71	NH061000	Hex Nut	M6	2	
72	WF061620	Washer	M6*ψ16	4	
73	207752	Plate		1	
74	WS060000	Lock Washer	M6	2	
75	SR069400	Cap Screw	M6*16	2	
76	SP040600	Pan Head Screw	M4*30	2	
77	205397A	Door Safety Switch	AZ7311	1	
78	207751	Plate		1	
79	SR069400	Cap Screw	M6*16	2	
80	WS060000	Lock Washer	M6	2	
81	WF061620	Washer	M6*ψ16	2	
82	SH100700	Hex Head Bolt	M10*35	2	
83	NH101700	Hex Nut	M10	2	
89	NH101700	Hex Nut	M10	1	

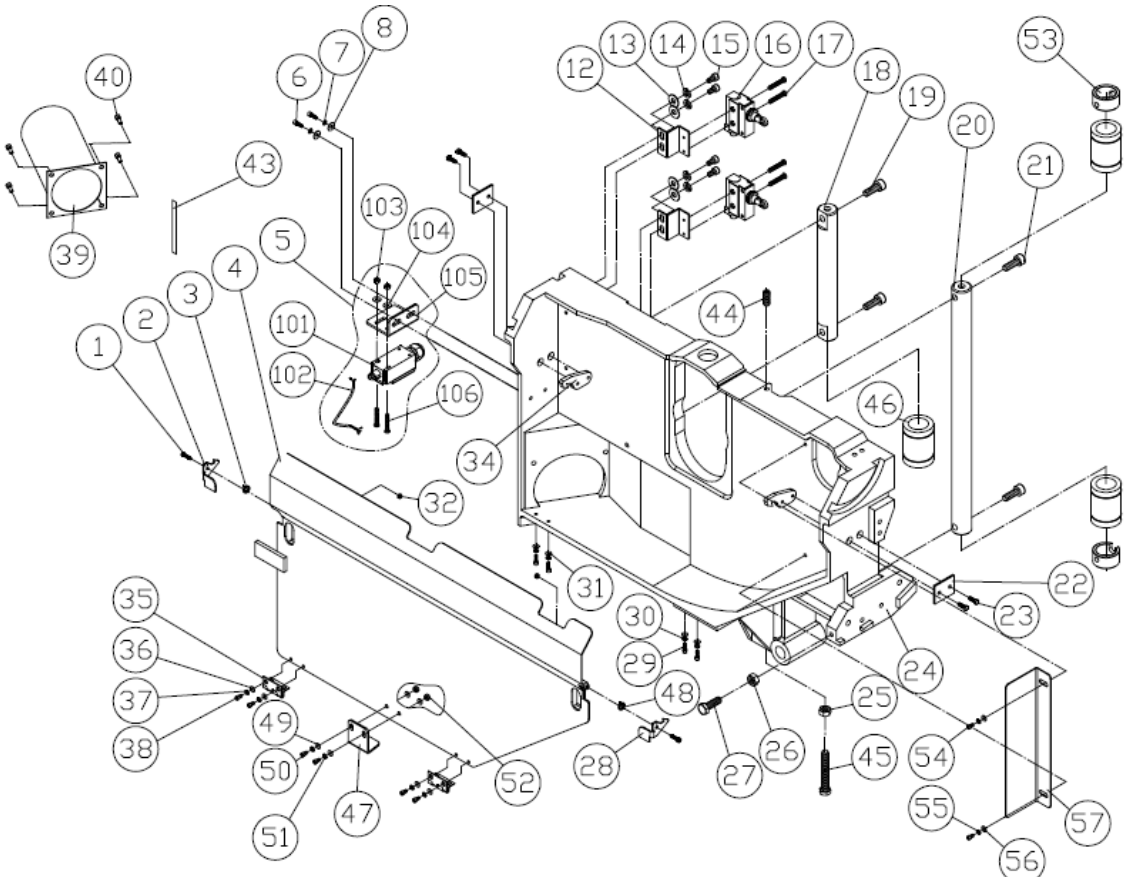
ITEM	PART NO	PARTS NAME	SIZE		Q`TY	NOTE
90	SH100800	Hex Head Bolt	M10*40		1	
91	201150	Adjust Foot	M16x100		4	S
92	SH161100	Hex Head Bolt	M16x50		4	S
93	NH162400	Hex Nut	M16		4	S
94	SR069400	Cap Screw	M6*16		2	
95	WS060000	Lock Washer	M6		2	
96	WF061620	Washer	M6*ψ16		2	
97	207756	Plate			1	
98	SS080500	Set Screw	M8*25		6	
99	NH081300	Hex Nut	M8		6	
100	709421	Strain Relief	M20	N-PGN21-28B	1	



ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
1	SS100400	Set Screw	M10x20	5	H
2	NH101700	Hex Nut	M10	5	H
3	207077	Left Ext. Plate	Standard-small	1	R
	207151	Left Ext. Plate	Optional-big	1	Optional
4	SR100500	Cap Screw	M10x25	5	H
5	207006	Table		1	R
6	207078	Ext. Plate	Standard-big	1	R
	207079	Ext. Plate	Optional-small	1	Optional
7	WF102030	Washer	M10xψ20	5	H
8	WS100000	Lock Washer	M10	5	H
9	SJ069300	Button Head Screw	M6x12	4	
10	206354	Table Insert	Alu.	1	
11	SS162000	Set Screw	M16x100	4	
12	NL162400	Lock Nut	M16	4	
13	205016	Washer		8	
14	NH162400	Hex Nut	M16	4	

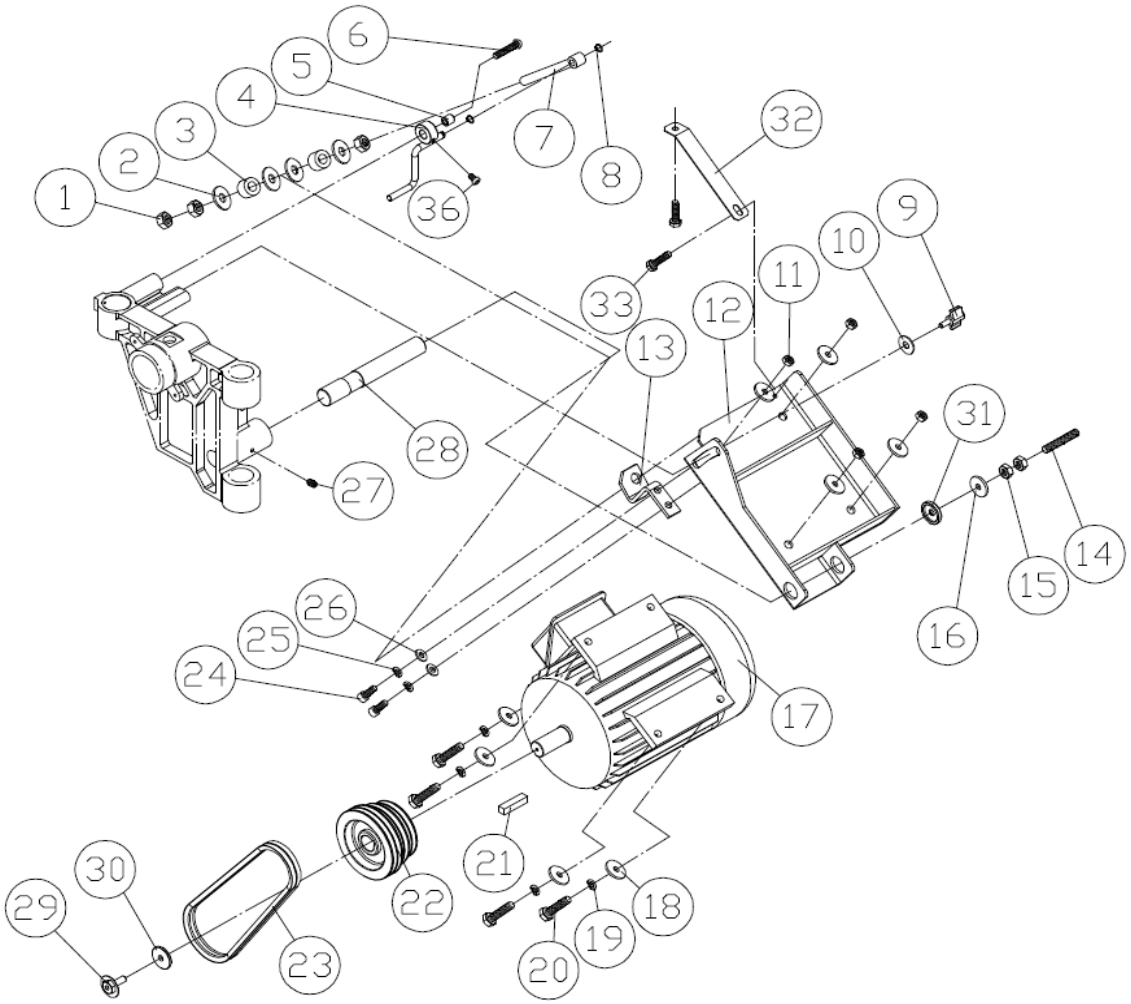


ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
1	994855A	Dust Cove	R2 PRCF	4	
2	994855	Switch Button-ON	R2 PNF-1A-G	2	
3	994856	Switch Button-OFF	R2 PNF-1B-R	2	
4	994819	Emergency Stop Button	R2 PNR4-3B-R	1	
5	207826	Label		1	
6	207314	Plate		1	GK
7	WS060000	Lock Washer	M6	4	
8	SR069400	Cap Screw	M6*16	4	
9	SR039300	Cap Screw	M3*12	2	
10	205797	Terminal	E-PM4N-06P	1	
11	WS030000	Lock Washer	M3	2	
12	NH030500	Hex Nut	M3	2	



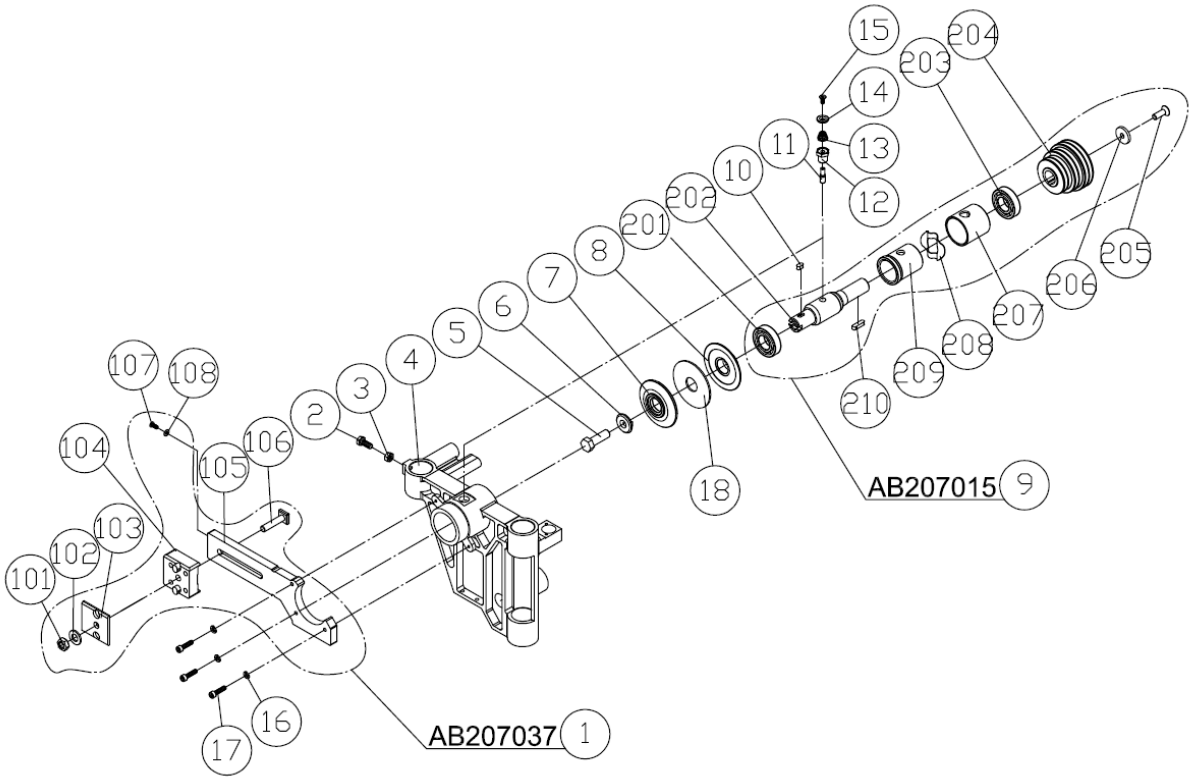
ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
1	SR040600	Cap Screw	M4*30	2	
2	207055	Hook(L)		1	
3	207057	Spring		1	
4	207061	Cover		1	F1L
5	AB136011	Door Safety Switch ASM		1	
101	136012	Door Safety Switch		1	
102	IC200810	STOP CORD	0.75x2Cx3.1Mx4Y	1	
103	NH040700	Hex Nut	M4	2	
104	WF040805	Washer	M4*ψ8	2	
105	200853	Fix Plate		1	
106	SP040700	Pan Head Plate	M4*35	2	
6	SR060200	Cap Screw	M6*10	2	
7	WS060000	Lock Washer	M6	2	
8	WF061310	Washer	M6*ψ13	2	
12	205477	Plate		2	
13	WF061310	Washer	M6*ψ13	4	
14	WS060000	Lock Washer	M6	4	
15	SR069300	Cap Screw	M6*12	4	
16	205397A	Door Safety Switch	AZ7311	2	
17	SP040600	Pan Head Screw	M4*30	4	
18	207005	Shaft		1	

ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
19	SR080700	Cap Screw	M8*35	2	
20	207660	Shaft		1	
21	SR080900	Cap Screw	M8*45	2	
22	207071	Plate		2	
23	SH060400	Hex Head Bolt	M6*20	4	
24	207001	Channel Base		1	
25	NH081300	Hex Nut	M8	1	
26	NH081300	Hex Nut	M8	1	
27	SH080500	Hex Head Bolt	M8*25	1	
28	207056	Hook(R)		1	
29	SR050200	Cap Screw	M5*10	4	
30	WS050000	Lock Washer	M5	4	
31	WF051010	Washer	M5*10	4	
32	NL040700	Lock Nut	M4	2	
34	207066	Hook		2	
35	207940	Hinge		2	
36	WF051010	Washer	M5*10	4	
37	WS050000	Lock Washer	M5	4	
38	SR059200	Cap Screw	M5*8	4	
39	206118	Dust Port		1	
40	SF089300	Hex Head Bolt(+)/W	M8x12	4	
43	150527	Sponge		2	
44	SS080400	Setscrew	M8*20	1	
45	SH081000	Hex Head Bolt	M8*50	1	
46	BL450602	Bearing	LM30UU	3	
47	207152	Plate		1	
48	207057A	Spring		1	
49	WF051010	Washer	M5*10	4	
50	SR059400	Cap Screw	M5*16	2	
51	WS050000	Lock Washer	M5	2	
52	NH050800	Hex Nut	M5	2	
53	207669	Ring		2	
54	SR060200	Cap Screw	M6*10	2	
55	WS060000	Lock Washer	M6	2	
56	WF061620	Washer	M6*ψ16	2	
57	207936	Plate		1	



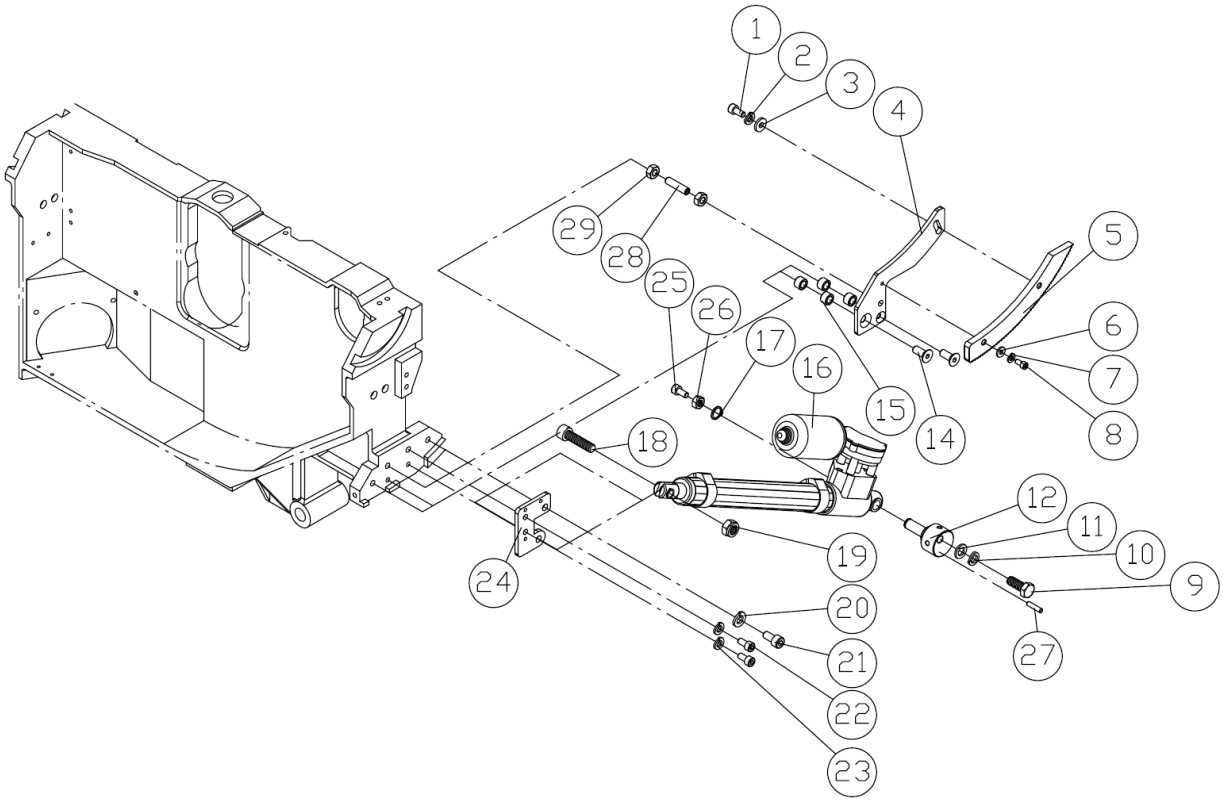
ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
1	NH142200	Hex Nut	M14	3	
2	WF143030	Washer	M14*ψ30	4	
3	207048	Pad		2	
4	207043	Adjusting Shaft		1	
5	200999	Bushing		1	
6	SJ080600	Button Head Screw	M8*30	1	
7	207046	Adjusting Screw		1	
8	RS100000	Retaining Ring	S10	2	
9	207156	Lock Knob		1	
10	WF083030	Washer	M8*ψ30	1	
11	NH101700	Hex Nut	M10	4	
12	207138A	Motor Plate		1	3PH
	207951	Motor Plate		1	1PH
13	207042	Plate		1	
14	SS101100	Set Screw	M10*55	1	
15	NH101700	Hex Nut	M10	2	
16	WF104030	Washer	M10*ψ40	1	

ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
17	MH207003	Main Motor		1	
	MH207004	Main Motor	Y-Δ	1	Optional
18	WF104030	Washer	M10*ψ40	8	
19	WS100000	Lock Washer	M10	4	
20	SH100800	Hex Head Bolt	M10*40	4	
21	KS080750	Key	8*7*50	1	
22	207053	Motor Pulley	50HZ	1	X2, CE
	207110	Motor Pulley	60HZ	1	CSA
23	207130	V-Belt	3VX-315	2	CE
	207141	V-Belt	3VX-300	2	CSA
24	SR080500	Cap Screw	M8*25	2	
25	WS080000	Lock Washer	M8	2	
26	WF081818	Washer	M8*ψ18	2	
27	SS089300	Set Screw	M8*12	1	
28	207050	Shaft		1	
29	SG100400	Hex Head Cap Screw/W	M10*20	1	
30	WF104030	Washer	M10*ψ40*3t	1	
31	207153	Washer		1	
32	207188	Plate		1	F1L
33	SF089300	Hex Head Bolt(+)/W	M8x12	2	
36	SR080200	Cap Screw	M8*10	1	



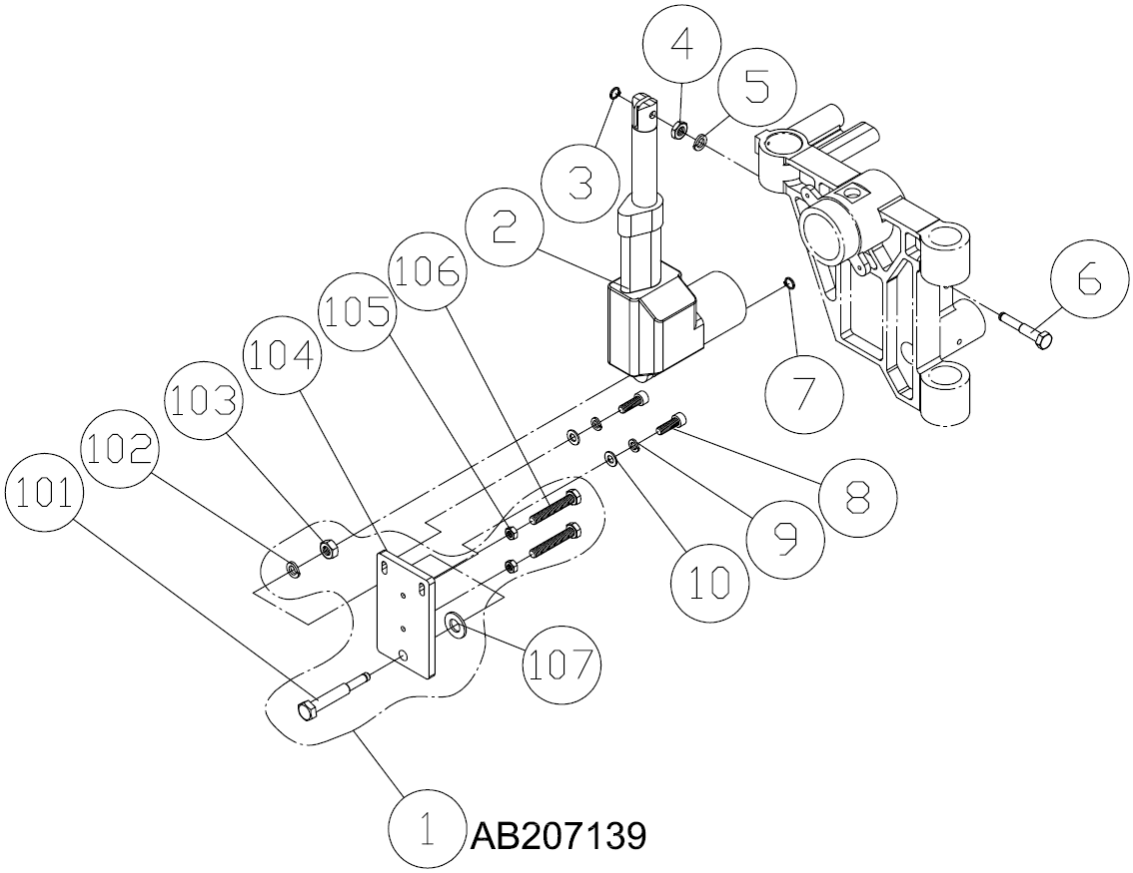
ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
1	AB207037	Bracket Assembly		1	X2
101	NH121900	Hex Nut	M12*1.75	1	
102	WF163030	Washer	M16*ψ30	1	
103	207030			1	
104	207040	Block		1	
105	207037	Bracket		1	X2
106	207031	Screw		1	
107	SJ069300	Button Head Screw	M6*12	1	
108	WF061920	Washer	M6*ψ19	1	
2	SH080400	Hex Head Bolt	M8*20	1	
3	NH081300	Hex Nut	M8	1	
4	207003B	Bracket		1	
5	207019	Bolt	M16*2p(L)	1	
6	207012	Washer		1	
7	207014	Flange	ψ30	1	
	207157	Flange	ψ25.4	1	Optional
8	207013	Flange		1	
9	AB207015	Main Shaft Assembly	ψ30	1	
201	BB620604	Ball Bearing	6206LLB(black)	1	
202	207015	Main Shaft	ψ30	1	
	207158	Main Shaft	ψ25.4	1	Optional
203	BB620604	Ball Bearing	6206LLB(black)	1	

ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
204	207020	Pulley		1	X2
205	SI100500	Counter Sunk Screw	M10*25	1	
206	205035	Washer		1	
207	207016	Ring		1	
208	WW425203	Wave Washer	ψ42*ψ52 t=0.3 (6205)	1	
209	207017	Ring		1	
210	KD080730	Key	8*7*30	1	
10	KD080715	Key	8*7*15	1	
11	207009	Shaft		1	
12	207010	Block		1	
13	207011	Cone Spring		1	
14	207008	Washer		1	
15	SI059300	Counter Sunk Screw	M5*12	1	F1L
16	WS060000	Lock Washer	M6	3	
17	SR060500	Cap Screw	M6*25	3	
18	207144	Washer		1	

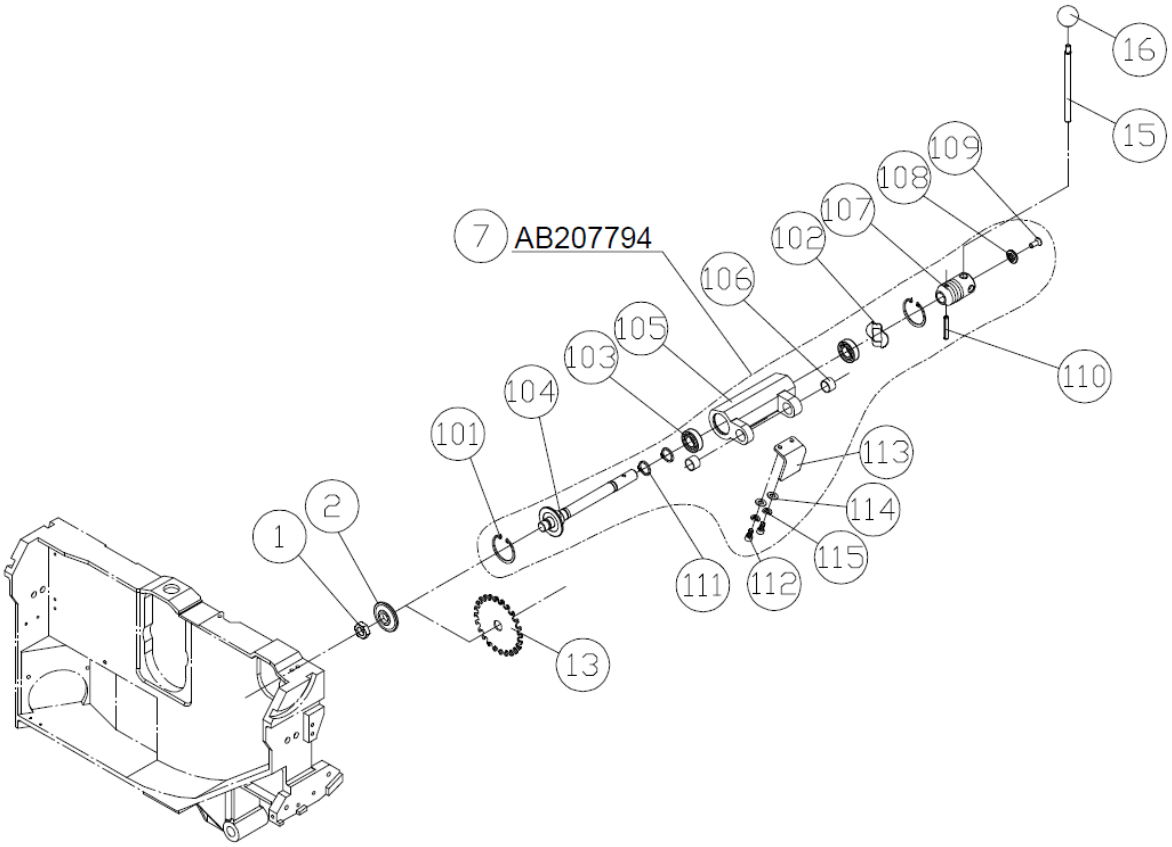


ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
1	SR080400	Cap Screw	M8*20	1	
2	WS080000	Lock Washer	M8	1	
3	WF081818	Lock Washer	M8xψ18	1	
4	207656	Plate		1	
5	207654	Rack		1	
6	WF061620	Washer	M6*ψ16	1	
7	WS060000	Lock Washer	M6	1	
8	SR060400	Cap Screw	M6*20	1	
9	SH120600	Hex Head Bolt	M12*30	1	
10	WS120000	Lock Washer	M12	1	
11	WF123025	Washer	M12*ψ30	1	
12	207485	Shaft		1	
14	SI100800	Counter Sunk Screw	M10×40	2	
15	200850	Bushing		4	
16	207449	Angle Driver		1	
17	RS140000	Retaining Ring	S14	1	
18	SR100800	Cap Screw	M10*40	1	
19	NL101700	Lock Nut	M10	1	
20	WS100000	Lock Washer	M10	1	
21	SR100500	Cap Screw	M10*25	1	
22	SR080400	Cap Screw	M8*20	2	

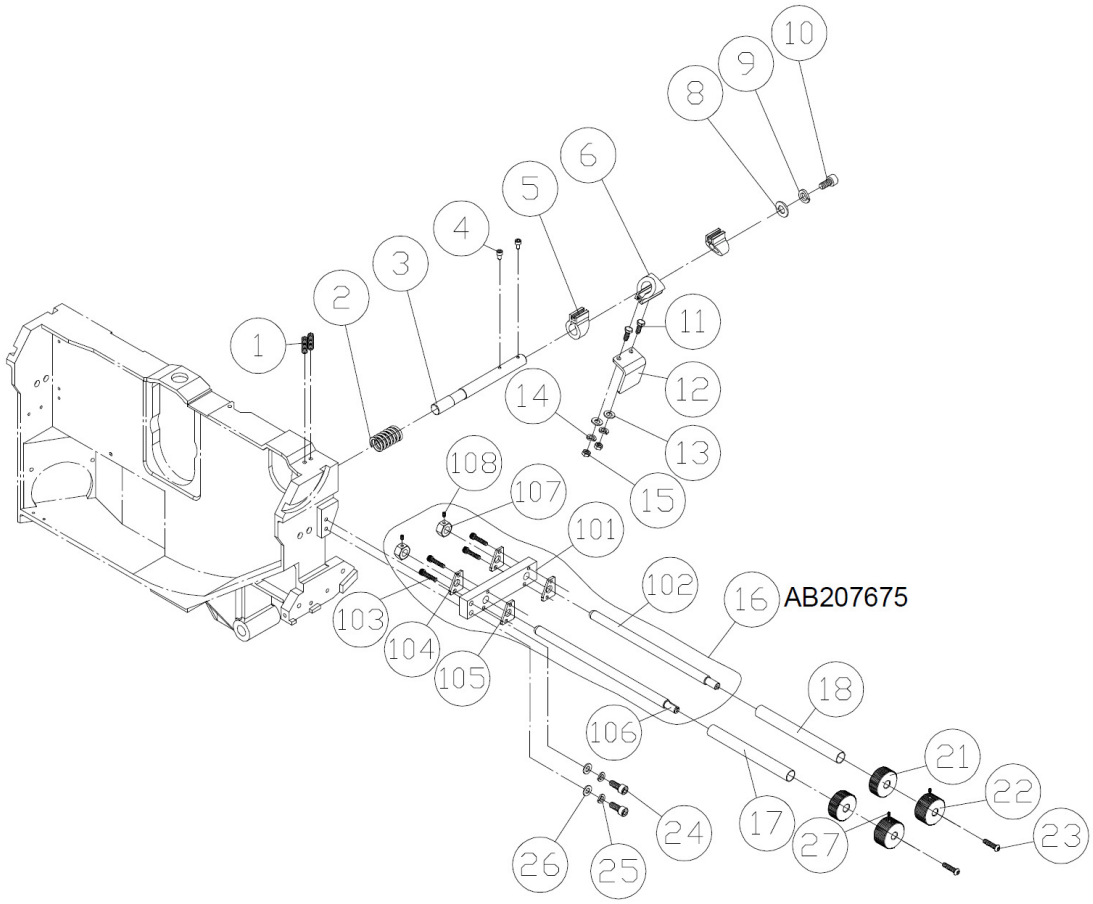
ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
23	WS080000	Lock Washer	M8	2	
24	207657	Plate		1	
25	SR080500	Cap Screw	M8*25	1	
26	NH081300	Hex Nut	M8	1	
27	PP052000	Pin	ψ5*20	1	
28	SS100800	Setscrew	M10×40	1	
29	NH101700	Hex Nut	M10	2	



ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
1	AB207139	Bar ASM		1	
101	207139	Bar		1	
102	WS140000	Lock Washer	M14	1	
103	NH142200	Hex Nut	M14	1	
104	207140	Plate		1	
105	NH081300	Hex Nut	M8	2	
106	SH081000	Hex Head Bolt	M8*50	2	
107	WF143030	Washer	M14*ψ30	1	
2	AB205545	Height Driver		1	Ass'y
	205545	Height Driver		1	
	205545-1	Gear		1	
	994656	Switch		1	
3	RS100000	Retaining Ring	S10	1	
4	NH121904	Hex Nut(thin)	M12	1	
5	WS120000	Lock Washer	M12	1	
6	207142	Bar		1	
7	RS100000	Retaining Ring	S10	1	
8	SR080600	Cap Screw	M8*30	2	
9	WS080000	Lock Washer	M8	2	
10	WF081818	Washer	M8*ψ18	2	

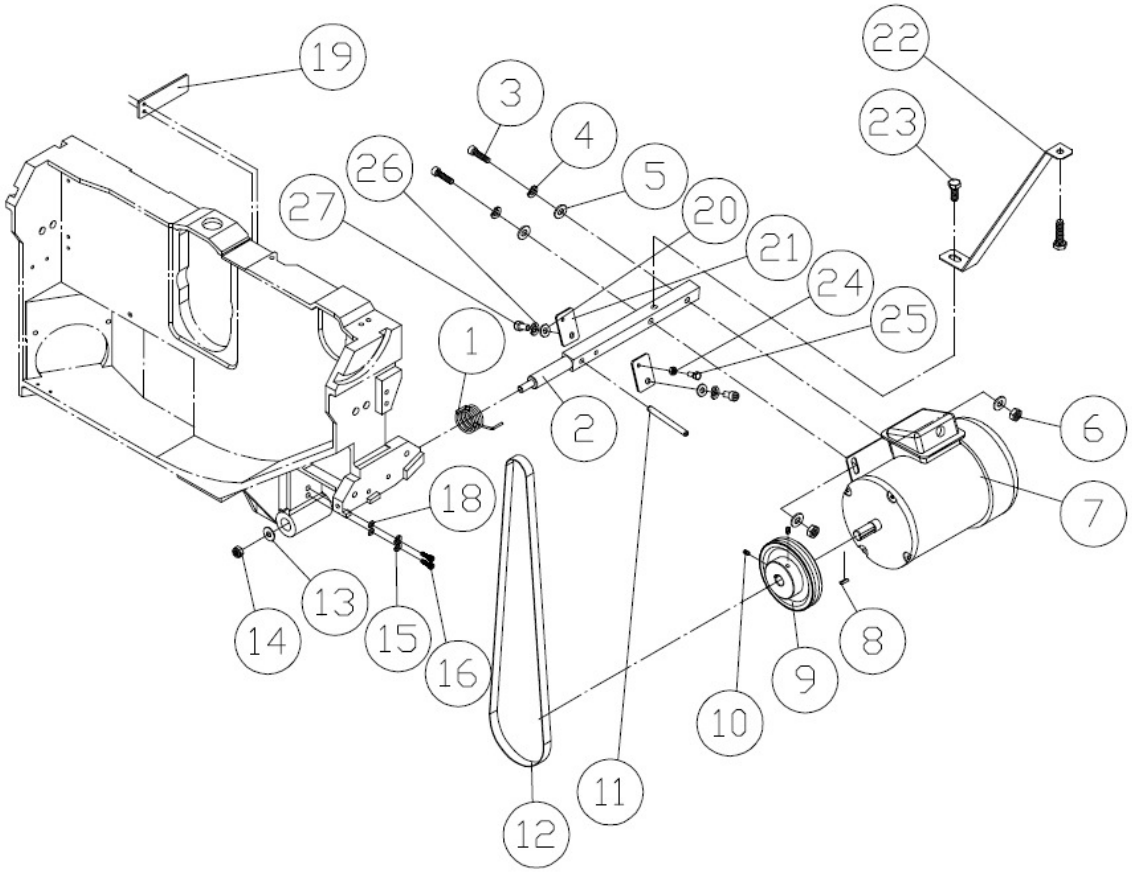


ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
1	207024	Hex Nut	M18*1.5p	1	
2	207796	Flange		1	
7	AB207794	Shaft Assembly		1	
101	RR420000	Int. Retaining Ring	R42	2	
102	WW304003	Wave Washer	ψ30.1*ψ40.6 t=0.3 (6302)	3	
103	BB600404	Ball Bearing	6004LLB(black)	2	
104	207794	Shaft		1	
105	207022	Bracket		1	
106	994352	Bushing Bearing	DU2015	2	
107	207232	Pulley		1	
108	203035	Washer		1	
109	SI080500	Counter Sunk Screw	M8*25	1	
110	PS064000	Spring Pin	ψ6*40	1	
111	RS200000	Retaining Ring	S20	2	
112	SR069400	Cap Screw	M6*16	2	
113	207036	Block		1	
114	WF061310	Washer	M6*ψ13	2	
115	WS060000	Lock Washer	M6	2	
13	200973	Scoring Saw Blade	φ20	1	
	201937	Scoring Saw Blade	120mm(φ20)	1	
15	205088	Rod		1	
16	100271	Ball Knob	M8*1.25P	1	



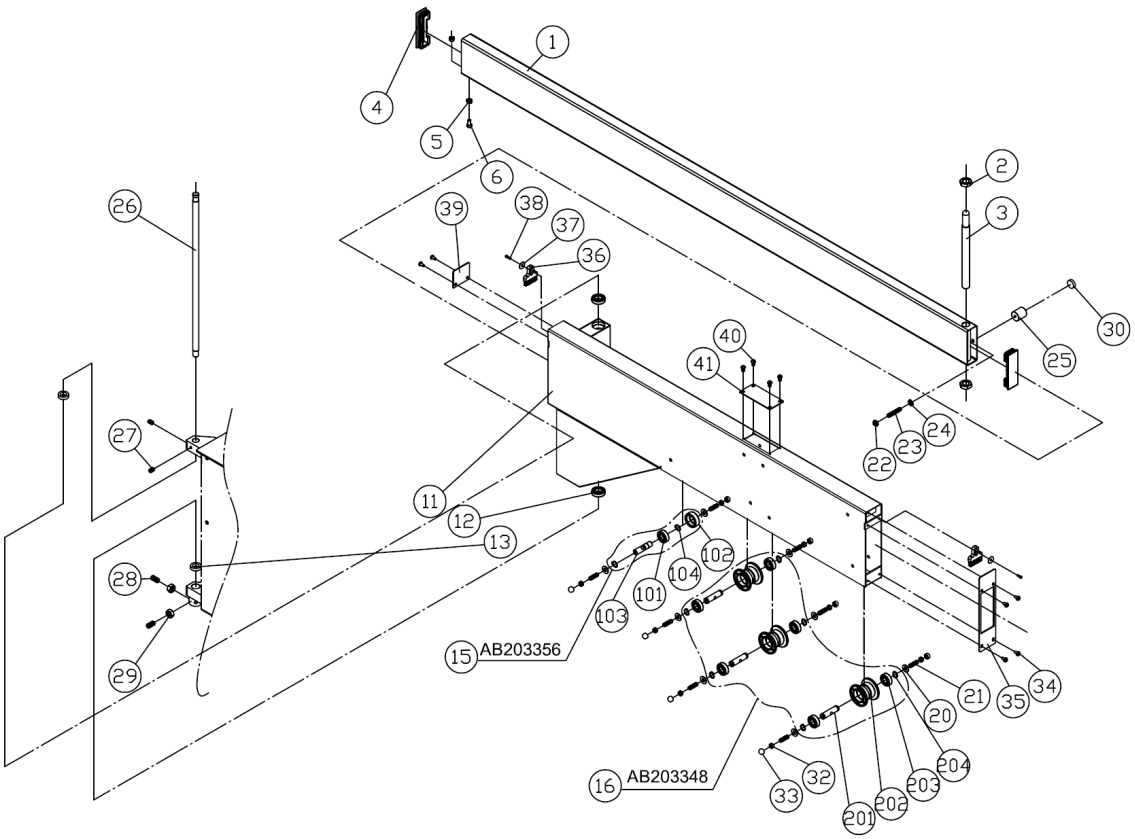
ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
1	SS080400	Setscrew	M8x20	2	
2	207041	Spring		1	
3	207032	Shaft		1	
4	SR060200	Cap Screw	M6*10	2	
5	207033	Ring		2	
6	207034	Ring		1	
8	WF083030	Washer	M8*ψ30	1	
9	WS080000	Lock Washer	M8	1	
10	SR089400	Cap Screw	M8*16	1	
11	SH069400	Hex Head Bolt	M6*16	2	
12	207036A	Block		1	
13	WF061310	Washer	M6*ψ13	2	
14	WS060000	Lock Washer	M6	2	
15	NH061000	Hex Nut	M6	2	
16	AB207675	Screw Threads ASM		1	
101	207035	Block		1	
102	207675	Screw Threads		1	
103	SR050700	Cap Screw	M5*35	4	
104	207133-B	Plate		2	
105	207133-A	Plate		2	
106	207676	Screw Threads		1	

ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
107	207135	Hex Nut		2	
108	SS060100	Setscrew	M6*5	2	
17	207678	Bushing		1	
18	207677	Bushing		1	
21	207044	Hex Nut		2	
22	207683	Handle		2	
23	SJ060600	Button Head Screw	M6*30	2	
24	SR080700	Cap Screw	M8*35	2	
25	WS080000	Lock Washer	M8	2	
26	WF081818	Washer	M8*ψ18	2	
27	SS050200	Setscrew	M5*10	2	
28	WF061310	Washer	M6*ψ13	2	



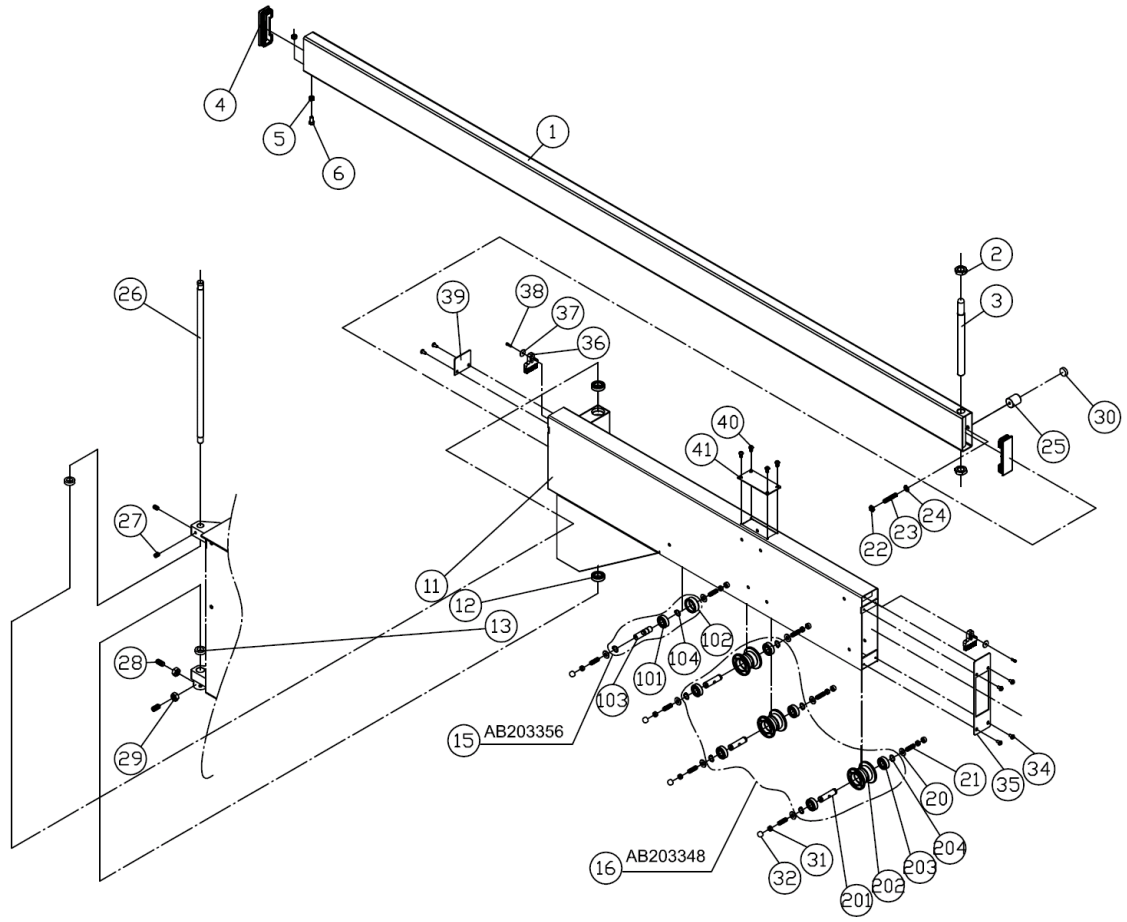
ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
1	207072	Spring		1	
2	207052	Fix Pole		1	
3	SR080900	Cap Screw	M8*45	2	
4	WS080000	Lock Washer	M8	2	
5	WF081818	Washer	M8*ψ18	4	
6	NH081300	Hex Nut	M8	2	
7	MH207002	Motor		1	
8	KS050530	Key	5*5*30	1	
9	201028	Pulley	50HZ	1	CE
	201029	Pulley	60HZ	1	CSA
10	SS060400	Setscrew	M6*20	2	
11	PS087500	Spring pin	ψ8X75L	1	
12	LF420010	Belt	15W*1085L(50HZ)	1	CE
	LF410010	Belt	15W*1050L(60HZ)	1	CSA
13	WF104030	Washer	M10*ψ40	1	
14	NL101700	Lock Nut	M10	1	
15	WS080000	Lock Washer	M6	2	
16	SR060400	Cap Screw	M6*20	2	
18	WF061620	Washer	M6*ψ16	2	
19	207230	Stop Plate		1	
20	WF081818	Washer	M8*ψ18	2	

ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
21	207765	Plate		2	
22	207189	Plate		1	F1L
23	SF089300	Hex Head Bolt(+)/W	M8x12	2	
24	NH061000	Hex Nut	M6	1	
25	SH060400	Hex Head Bolt	M6*20	1	
26	WS080000	Lock Washer	M8	2	
27	SR089300	Cap Screw	M8*12	2	



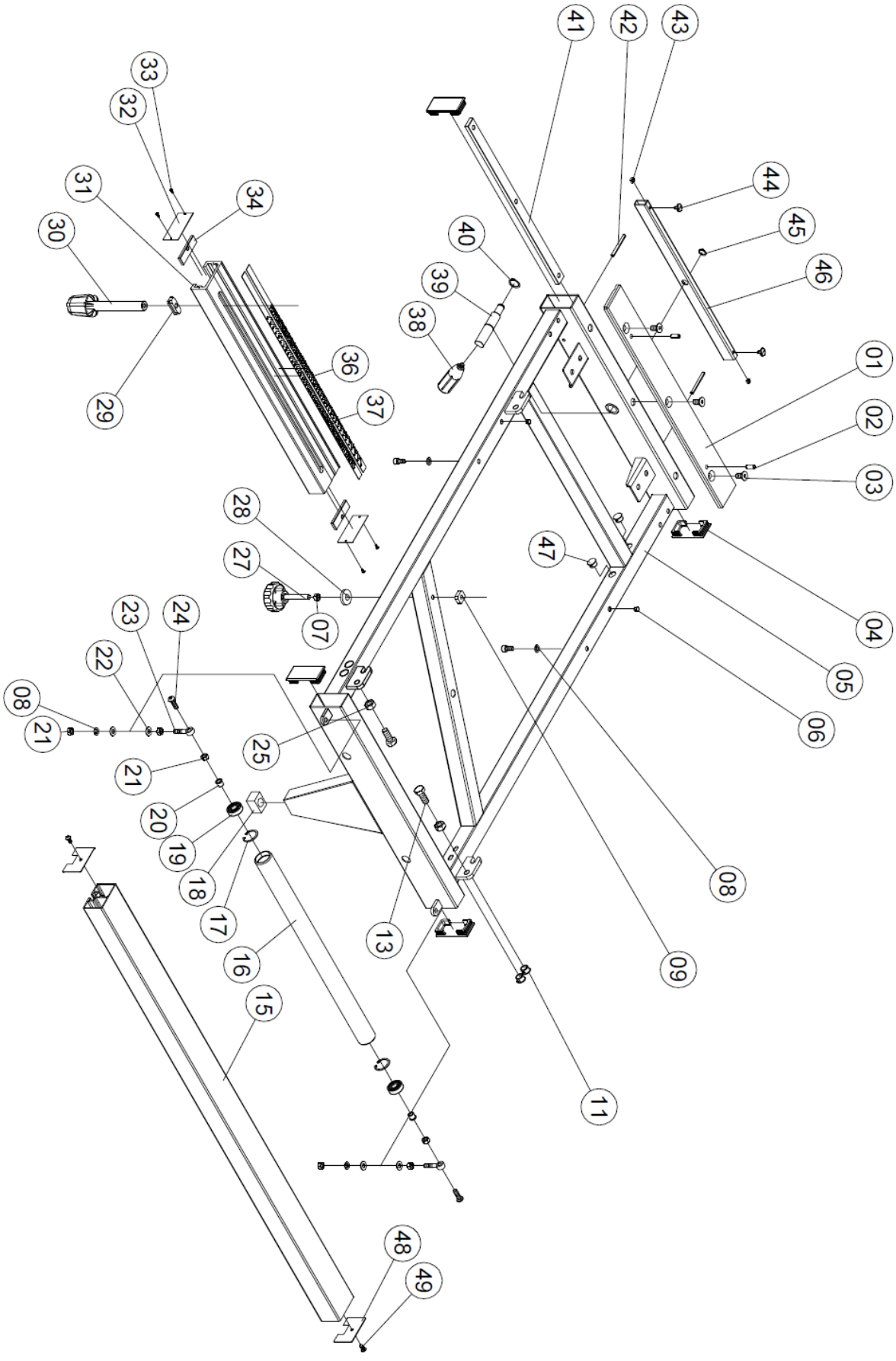
ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
1	205208	Sliding Tube		1	
2	203545	Hex Nut	M20	2	
3	205505	Screw Threads	M20	1	
4	203470	Plug	40*120	2	
5	NH081300	Hex Nut	M8	2	
6	SH080400	Hex Head Screw	M8*20	1	
11	207948	Rotary Arm		1	GK
12	BB600302	Ball Bearing	6003ZZ	2	
13	205519	Washer		2	
15	AB203356	Ring Assembly		1	
101	BB620202	Ball Bearing	6202ZZ	1	
102	203356	Ring		1	
103	203357	Shaft		1	
104	RS150000	Retaining Ring	S15	2	
16	AB203348	Roller Assembly		3	
201	203349	Shaft		1	
202	203348	Roller		1	
203	BB620202	Ball Bearing	6202ZZ	2	
204	RS150000	Retaining Ring	S15	2	
20	WF081818	Washer	M8*ψ18	8	
21	SS080600	Set Screw	M8*30	8	

ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
22	203239	Hex Nut	M8*1.25P	1	
23	SS080700	Set Screw	M8*35	1	
24	WS080000	Spring Washer	M8	1	
25	201146-1	Magnetic Bracket		1	
26	205518	Shaft		1	
27	SS089300	Set Screw	M8*12	2	
28	SS100400	Set Screw	M10*20	4	
29	NH101700	Hex Nut	M10	4	
30	200934-2	Magnetic Iron		1	
32	NH081300	Hex Nut	M8	8	
33	207582	Cover	13mm	8	
34	SJ060200	Button Head Screw	M6*10	6	
35	207085	Cover		1	GK
36	135051-A	Brush		2	
37	WF061310	Washer	M6*13	2	
38	SR060400	Cap Screw	M6*20	2	
39	207084	Plate		1	GK
40	SJ059200	Button Head Screw	M5*8	4	
41	207528	Plate		1	GK



ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
1	205395	Sliding Tube		1	T
2	203545	Hex Nut	M20	2	
3	205505	Screw Threads	M20	1	
4	203470	Plug	40*120	2	
5	NH081300	Hex Nut	M8	2	
6	SH080400	Hex Head Screw	M8*20	1	
11	207948	Rotary Arm		1	GK
12	BB600302	Ball Bearing	6003ZZ	2	
13	205519	Washer		2	
15	AB203356	Ring Assembly		1	
101	BB620202	Ball Bearing	6202ZZ	1	
102	203356	Ring		1	
103	203357	Shaft		1	
104	RS150000	Retaining Ring	S15	2	
16	AB203348	Roller Assembly		3	
201	203349	Shaft		1	
202	203348	Roller		1	
203	BB620202	Ball Bearing	6202ZZ	2	
204	RS150000	Retaining Ring	S15	2	
20	WF081818	Washer	M8*ψ18	8	

ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
21	SS080600	Set Screw	M8*30	8	
22	203239	Hex Nut	M8*1.25P	1	
23	SS080700	Set Screw	M8*35	1	
24	WS080000	Spring Washer	M8	1	
25	201146-1	Magnetic Bracket		1	
26	205518	Shaft		1	
27	SS089300	Set Screw	M8*12	2	
28	SS100400	Set Screw	M10*20	4	
29	NH101700	Hex Nut	M10	4	
30	200934-2	Magnetic Iron		1	
31	NH081300	Hex Nut	M8	8	
32	207582	Cover	13mm	8	
34	SJ060200	Button Head Screw	M6*10	6	
35	207085	Cover		1	GK
36	135051-A	Brush		2	
37	WF061310	Washer	M6*13	2	
38	SR060400	Cap Screw	M6*20	2	
39	207084	Plate		1	GK
40	SJ059200	Button Head Screw	M5*8	4	
41	207528	Plate		1	GK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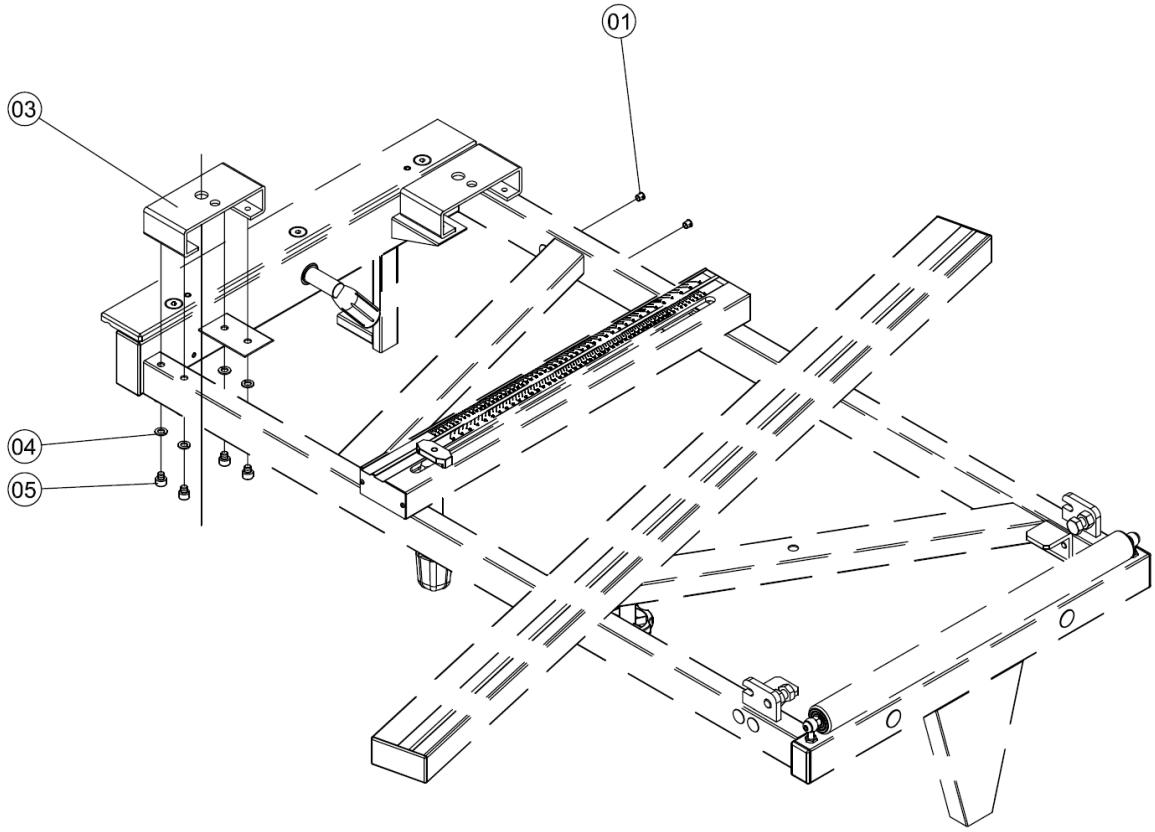
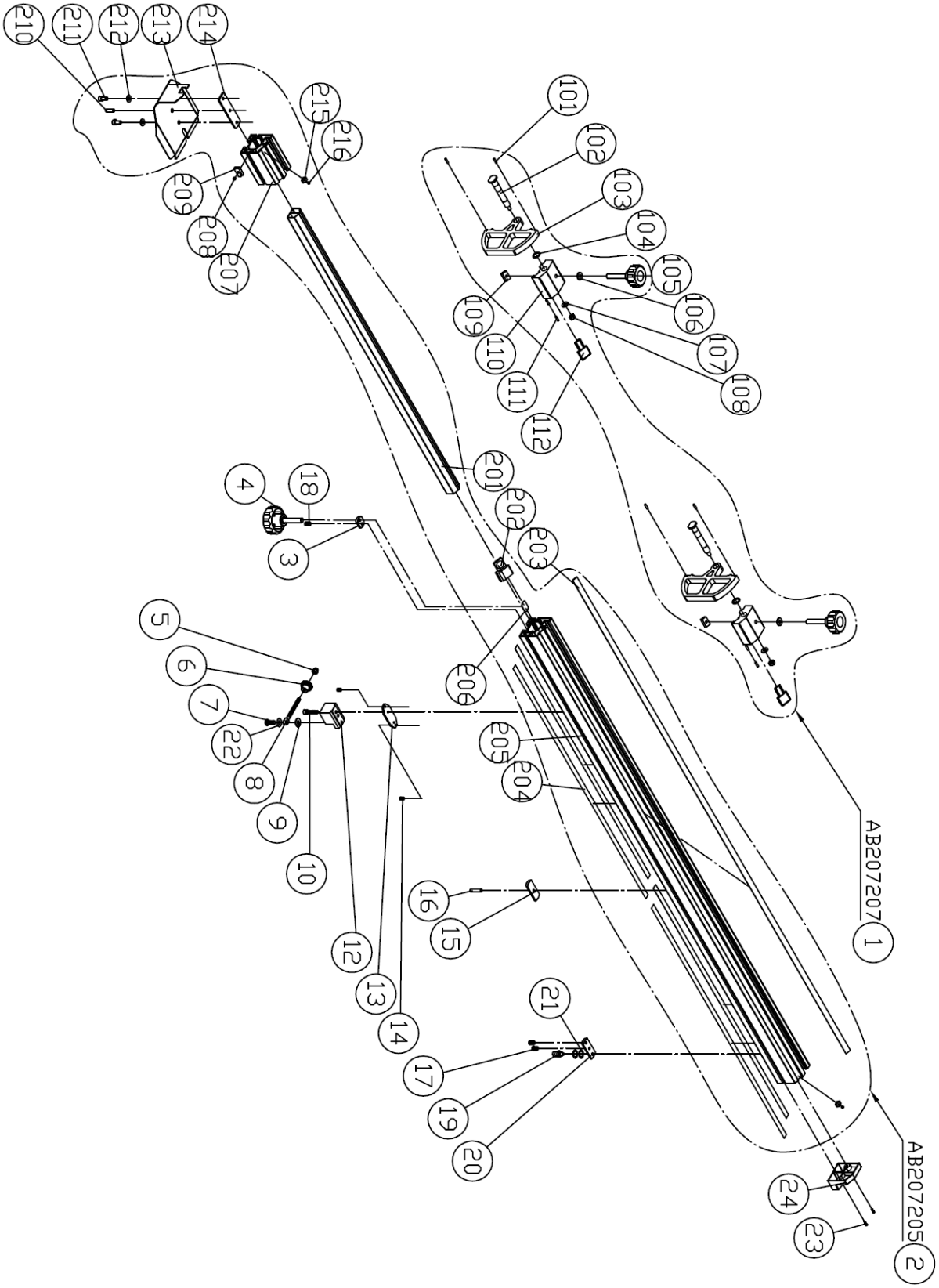
ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
1	203116	Fixed Plate		1	
2	PS082000	Spring Pin	ψ8×20	2	
3	SI100400	Counter Sunk Screw	M10×20	3	
4	200910	Plug	40×80	4	
5	203979	Frame		1	R
6	201576	Hole Plugs	HP-09	2	
7	NH081300	Hex Nut	M8	1	
8	WS080000	Lock Washer	M8	4	
9	201103	T-Nut	M8x1.25p	1	
11	203284	Hole Plugs	HP-19	4	
13	SH120801	Screw	M12×1.25×40	2	
15	200833	Pipe		1	
16	203302	Roller		1	
17	RR320000	Retaining Ring	R32	2	
18	203094	Plug		1	
19	BB620102A	Ball Bearing	6201ZZ	2	
20	017058	Bearing		2	
21	NH081300	Hex Nut	M8	6	
22	WF081818	Washer	M8x18	4	
23	201542	Eye Bolt	M8×40	2	
24	SJ080500	Button Head Screw	M8×25	2	
25	NH121900	Nut	M12	2	
27	200827	Knob	M8x1.25px40L	1	
28	WF083020	Washer	M8	1	
29	203122	Block		1	
30	203128	Handle		1	
31	203855	Pipe		1	X7
32	203856	Plate		2	
33	SJ039200	Button Head Screw	M3×8	4	
34	203121	Fixed Block		2	
36	207924-2	Ruler		1	
37	207924-1	Ruler		1	
38	203719	Knob		1	
39	203114	Eccentric Shaft		1	
40	RS200000	Retaining Ring	S20	1	
41	203288	Fixed Block		1	
42	PS066000	Spring Pin	ψ6×60	2	
43	NS050800	Square Nut	M5	2	
44	203110	Screw	M5×10	2	
45	RS140000	Retaining Ring	S14	1	

ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
46	203109	Square Pipe		1	
47	203230	Hole Plugs	HP-16	2	
48	200955	Cover		2	
49	ST040200	Tap Screw	#8x3/8"	2	



ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
1	201576				
3	207734	Lock Washer	M8	8	R
4	WS080000	Cap Screw	M8×10	8	
5	SR080200				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AB207205
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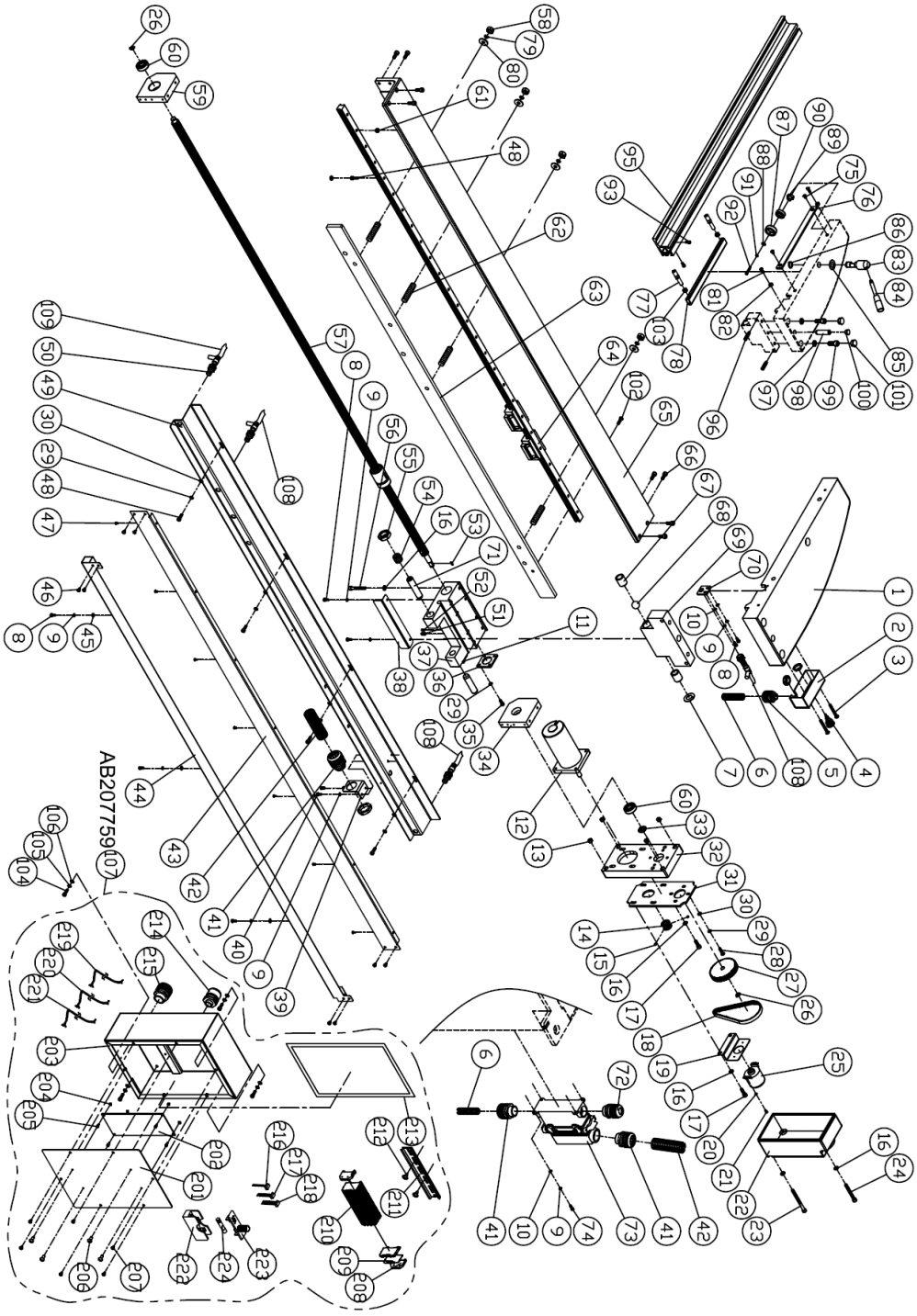
ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
1	AB207207	Flip Stop Assembly		2	A
101	207223	Pipe		2	
102	207203	Shaft		1	
103	207207	Flip Stop		1	
104	207208	Washer		1	
105	207263	Knob	M8x1.25px42L	1	
106	200472	Washer	M8x20x1	1	
107	WF081818	Washer	M8x18	1	
108	207235	Nut	M8	1	
109	207200	Nut		1	
110	207201	Stop Bracket		1	
111	207223	Pipe		2	
112	207202	Magnifier		1	
2	AB207205A	Ext. Fence Assembly	MM	1	Standard
	AB207205	Ext. Fence Assembly	MM/"	1	Optional
201	207212-1	Extended Tube	MM	1	Standard
	207212	Extended Tube	MM/"	1	Optional
202	207213	Magnifier		1	
203	207216-1	Rule	MM	1	Standard
	207216	Rule	MM/"	1	Optional
204	205544	Wearing Tape	875x15	4	
205	207205-1	Ext. Fence		1	
206	207884	Sheet		1	
207	207205-2	Ext. Fence		1	
208	SS069100	Setscrew	M6x6	1	
209	207211	Stop Block		1	
210	SS080500	Setscrew	M8x25	1	
211	SR089400	Cap Screw	M8x16	2	
212	WF081818	Washer	M8x18	2	
213	207210	Locate Plate		1	
214	207209	Plate		1	
215	207204	Nut		2	
216	SS050100	Setscrew	M5x5	2	
3	207222	Block		1	
4	200827	Knob	M8x1.25px40L	1	
5	NA081300	Nut	M8	1	
6	203790	Knob	M8*1.25p	1	
7	SJ080400	Button Head Screw	M8*20	1	
8	203598	Screw	M8*1.25p	1	
9	WF081818	Washer	M8*ψ18	1	
10	SR060800	Cap Screw	M6*40	1	
12	207219	Fixed Block		1	

ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
13	207220	Plate		1	
14	SS069100	Setscrew	M6*6	2	
15	207218	Fixed Block		1	
16	SS080700	Setscrew	M8*35	1	
17	SS089300	Setscrew	M8*12	2	
18	SS089300	Setscrew	M8*12	1	
19	200832	Rotate Shaft		1	
20	207737	Fixed Block		1	
21	200069	Fiber Washer	10x18	2	
22	992601	Copper Washer	8*16*0.2	1	
23	ST049200	Tap Screw	M4x8	2	
24	207851	Rotate Block		1	

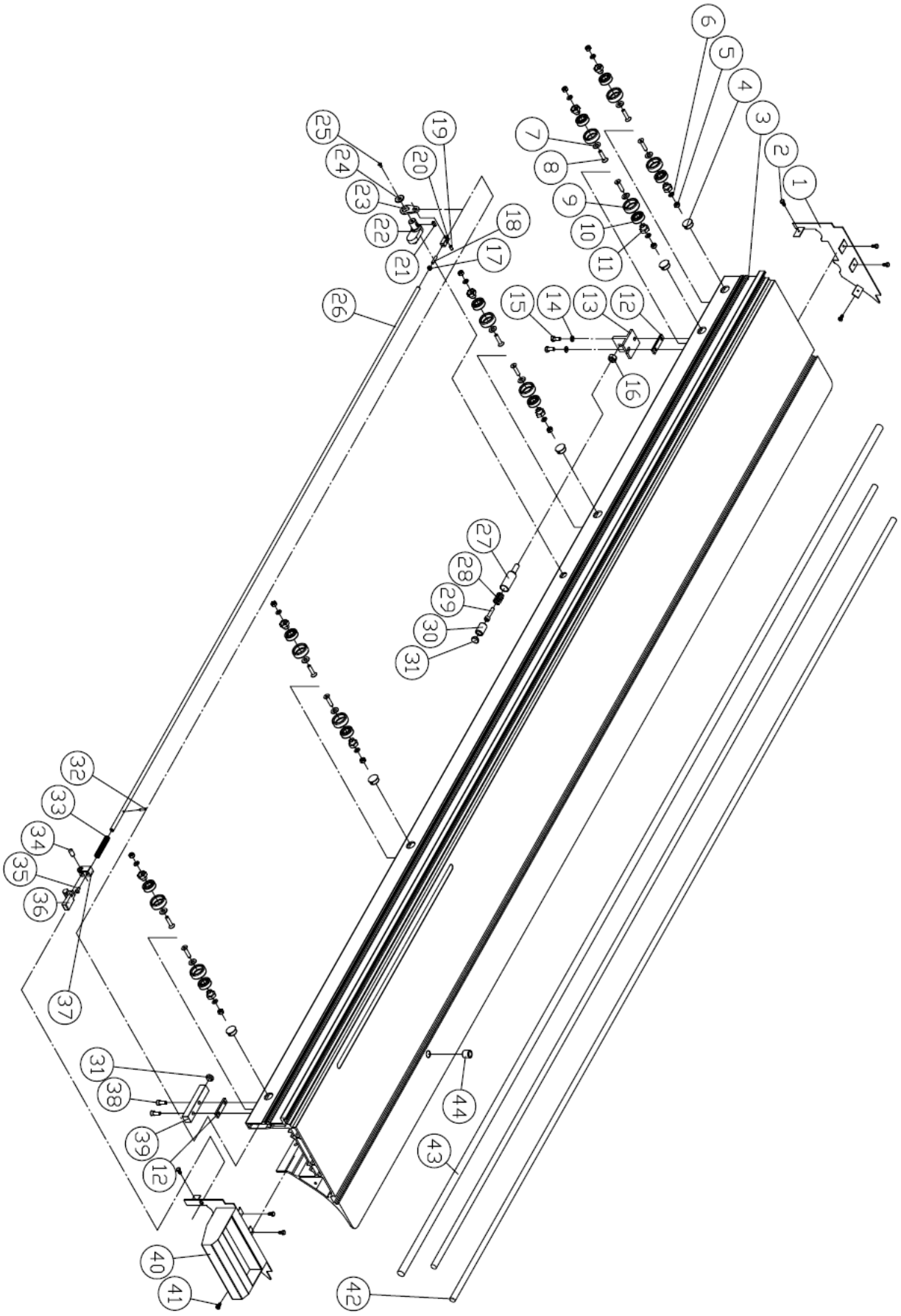

AB207759

ITEM	PART NO	PARTS NAME	SIZE		Q`TY	NOTE
1	203131	Fixed Base			1	
2	203296	Fixed Base			1	
3	SJ050900	Button Head Screw	M5*45	M5×45	2	
4	203297	Push-Button Switch			1	
5	203481	Corrugated Tubing Fitting	N-MGW16-15B-ST	N-MGW16-15B-ST	1	
6	203475	Plastic Corrugated Tubing	NGN-12B	NGN-12B	1	
7	203199	Thrust Washers			1	
8	SR040200	Cap Screw	M4*10	M4×10	7	
9	WS040000	Lock Washer	M4	M4	23	
10	WF040808	Washer	M4*ψ8	M4×ψ8	12	
11	SS049100	Set Screw	M4*6	M4×6	4	
12	205323	DC Motor			1	
13	NH061000	Nut	M6	M6	4	
14	203156	Pulley			1	
15	SS049000	Set Screw	M4*4	M4×4	2	
16	WS060000	Lock Washer	M6	M6	16	
17	SR060400	Cap Screw	M6*20	M6×20	4	
18	205320	Drive Belt			1	
19	205321	Fixed Base			1	
20	WS030000	Lock Washer	M3	M3	2	
21	SR030100	Cap Screw	M3*5	M3×5	2	
22	205105	Cover			1	
23	SR061500	Cap Screw	M6*75	M6×75	2	
24	SR061100	Cap Screw	M6*55	M6×55	2	
25	205319	Encoder			1	
26	RS100000	Retaining Ring	S10	S10	2	
27	203151	Pulley			1	
28	SJ050400	Button Head Screw	M5*20	M5×20	4	
29	WS050000	Lock Washer	M5	M5	12	
30	WF051010	Washer	M5*ψ10	M5×ψ10	8	
31	205354	Fixed Plate			1	
32	205101	Fixed Block			1	
33	203211	FINE U NUTS			1	
34	205318	Fixed Base			1	
35	SR059300	Cap Screw	M5*12	M5×12	4	
36	203182	Plate			1	
37	203133	Fixed Base			1	R
38	207674	Plate			1	
39	203782	Base			1	
40	SR049200	Cap Screw	M4*8	M4×8	2	
41	203889	Corrugated Tubing Fitting	N-PGN21-28B	N-PGN21-28B	3	
42	203888	Plastic Corrugated Tubing	NGN-23B	NGN-23B	1	

ITEM	PART NO	PARTS NAME	SIZE		Q`TY	NOTE
43	203851	Cover			1	R
44	207673	Cover			1	R
45	WF041008	Washer	M4*ψ10	M4×ψ10	3	
46	SP049100	Pan Head Screw	M4*6	M4×6	8	
47	SJ039100	Button Head Screw	M3×6	M3×6	7	
48	SR059400	Cap Screw	M5*16	M5×16	30	
49	207672	Fixed Plate			1	
50	203184	Proximity switch			4	
51	203198	Oil Filler Point			1	
52	SS059200	Set Screw	M5*8	M5×8	1	
53	KS030310	Flat Key	3*3*10	3×3×10	1	
54	SS200700	Set Screw	M20×35	M20×20	1	
55	203545	Nut	M20	M20	1	
56	SR060900	Cap Screw	M6*45	M6×45	8	
57	205324	Ballscrews			1	
58	NH121900	Hex Nut	M12		4	
59	203174	Fixed Base			1	
60	BB620104	Ball Bearing	6201LLB	6201ZZ	2	
61	203891	Threaded Inserts			26	
62	SS121200	Set screw	M12*60	M14×60	4	
63	203796	Fixed Plate			1	R
64	203795	Liner Guide			1	
65	203794	Fixed Base			1	
66	SR069400	Cap Screw	M6*16	M6×16	8	
67	203178	Bushing			2	
68	203180	Steel Ball	G20	G20	1	
69	203132	Fixed Base			1	
70	203196	Fixed Plate			1	
71	205665	Pin	ψ16*60	ψ16×60	2	
72	203860	Cable Gland	PGB21-18B		1	
73	203869	Joint	24P 16A PG21		1	
74	SR049300	Cap Screw	M4×12	M6×16	4	
75	SI069400	Counter Sunk Screw	M6*16		2	
76	203172	Fixed Plate			1	
77	203193	Shafts			2	
78	203192	Plate			1	
79	WS120000	Lock Washer	M12		4	
80	WF132225	Washer	M13x22x2.5		4	
81	SH069400	Hex Head Bolt	M6*16		2	
82	203179	Eccentric Ring			2	
83	203213	Eccentric Shaft			1	
84	200884	Handle			1	

ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
85	994214	Thrust Bearing		1	
86	RS200000	Retaining Ring	S20	1	
87	203356	Ring		1	
88	WF061920	Washer	M6*ψ19	1	
89	203195	Eccentric Bushings		1	
90	BB620202	Ball Bearing	6202ZZ	1	
91	WS060000	Lock Washer	M6	1	
92	SH060700	Hex Head Bolt	M6*35	1	
93	SR089200	Cap Screw	M8×8	2	
95	203191	Baffle		1	
96	SS100800	Setscrew	M10×40	2	
97	WS120000	Lock Washer	M12	2	
98	PP166000	Pin	ψ16×60	1	
99	SR120600	Cap Screw	M12×30	2	
100	203230	Hole Plugs	HP-16	1	
101	201458	Hole Plugs	HP-22	2	
102	SJ050400	Button Head Scred	M5*20	1	
103	NL081000	Lock Nut	M8	2	
104	SR059300	Cap Screw	M5×12	4	
105	WS050000	Lock Washer	M5	4	
106	WF051210	Washer	M5×ψ12	4	
107	AB207759	Case ASM		1	
201	207760	Plate		1	R
202	207708	IC Board		1	
203	207759	Case		1	R
204	NH030500	Nut	M3	4	
205	205411	Copper Pillar	M3x6/7,L=7mm	4	
206	SP039210	Pan Head Screw	M3*8	4	
207	SJ050200	Button Head Screw	M5*10	6	
208	203756	End Support	249-116	2	
209	203759	Sheet	2004-1291	1	
210	203755	Terminal	2002-1201	27	
211	205186	Aluminum Rail		0.17	
212	SP059200	Pan Head Screw	M5*8	2	
213	150527	Pad	2x300x7.5(M/M)	4	
214	709421	Strain Relief	M20 N-PGN21-28B	1	
215	201873	Strain Relief	MGB25-18B	1	
216	IC207058	Control panel cord	2.5 3P ROHS	6	
217	IC207057	Control panel cord	2.5 5P	1	
218	IC207056	Control panel cord	2.5 6P	1	
219	IC205023		22AWGx16Cx200M	0.01	
220	IC205021		22AWGx9Cx200M	0.0375	
221	IC205041		0.5x2Cx100M	0.051	

ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
222	205416	Fuse block	1P	1	
223	205416-01	Cover	DC	1	
224	994895	Fuse	5A 250VAC 30mm	2	
108	IC205516	Proximity switch cord	M124R-3M-L	3	
109	IC205517	Proximity switch cord	M124R-5M-L	1	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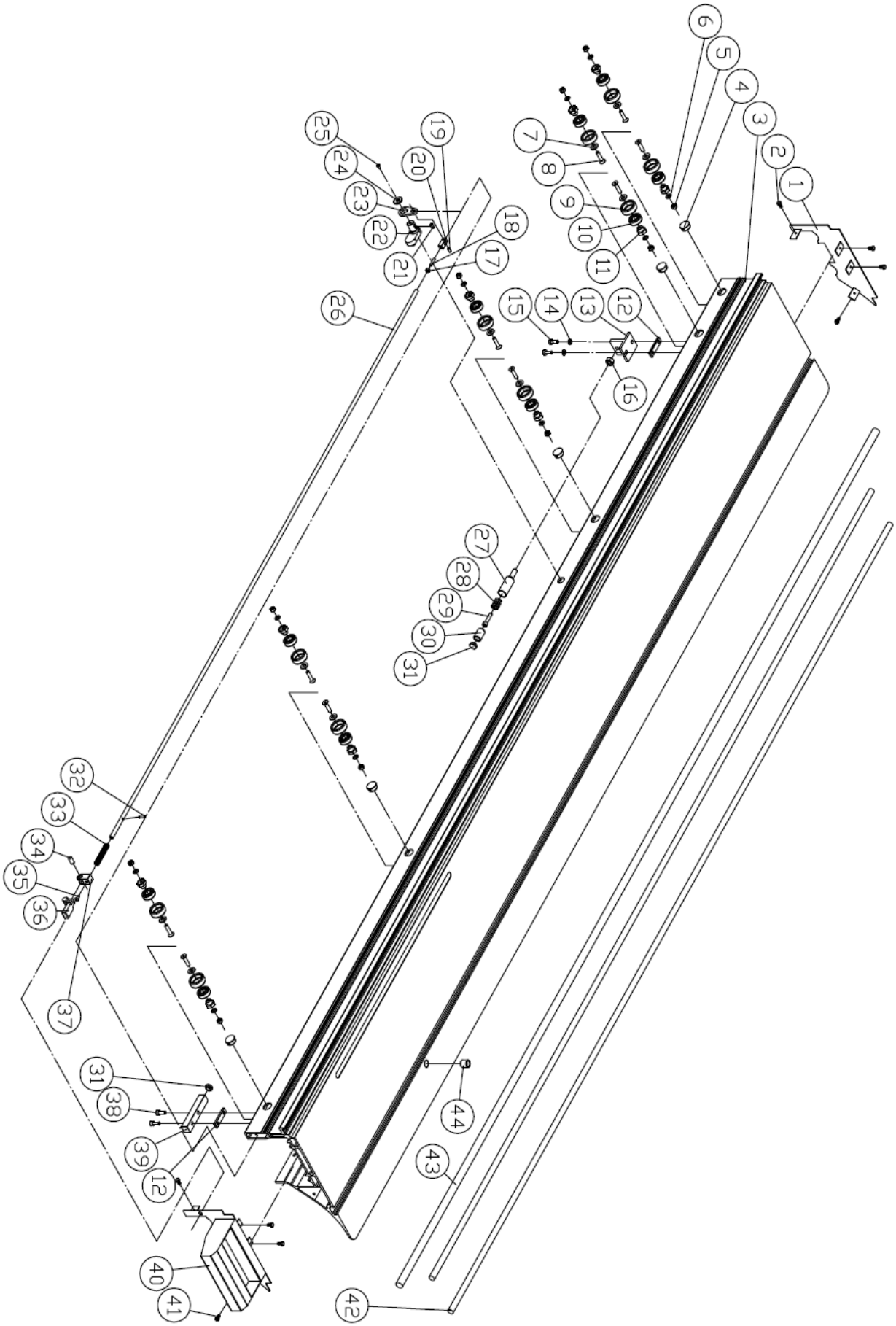
ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
1	203422	Plate		1	T3
2	SH050200	Hex Head Bolt	M5*10	4	
3	203524	Base		1	
4	203588	Hole plug	HP-25	5	
5	NH081300	Hex Nut	M8	10	
6	WS080000	Lock Washer	M8	10	
7	WF102025	Washer	M10*ψ20	10	
8	SI080700	Counter Sunk Screw	M8*35	10	
9	203356	Ring		10	
10	BB620202	Ball Bearing	6202ZZ	10	
11	203586	Eccentric shaft		10	
12	203703	Block		2	
13	203555	Fixed Base		1	
14	WS080000	Lock Washer	M8	2	
15	SH080400	Hex Head Bolt	M8*20	2	
16	NH121900	Hex Nut	M12	1	
17	NH061000	Hex Nut	M6	1	
18	SS060500	Set Screw	M6*25	1	
19	PS061200	Spring pin	ψ6*12	1	
20	203568	Block		1	
21	KD060614	Key	6*6*14L	1	
22	203566	Shaft		1	
23	203583	Plate		1	
24	203567	Ring		1	
25	SI050200	Counter Sunk Screw	M5*10	1	
26	203569	Lever		1	
27	203576	Base		1	
28	203578	Spring		1	
29	SR080800	Cap Screw	M8*40	1	
30	203577	Ring		1	
31	203557	Block		2	
32	PS052000	Spring pin	ψ5*20	1	
33	203571	Spring		1	
34	PP102000	Pin	ψ10*20	1	
35	SJ069300	Screw	M6*12	1	
36	203574	Block		1	
37	203573	Block		1	
38	SR080400	Cap Screw	M8*20	2	
39	203572	Fixed Block		1	
40	203423	Hander		1	T3

ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
41	SH050200	Hex Head Bolt	M5*10	4	
42	203527	Cylinder		2	
43	203526	Cylinder		1	
44	203702	Ring		1	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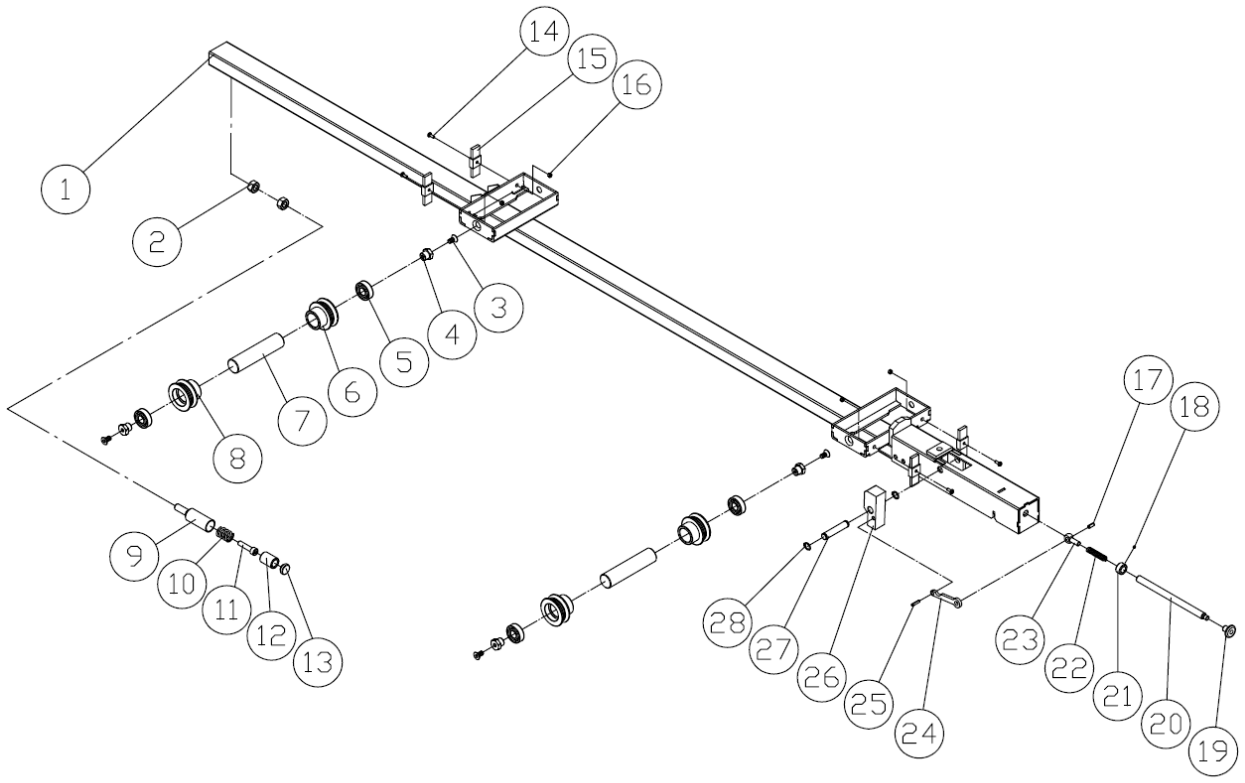
ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
1	203422	Plate		1	T3
2	SH050200	Hex Head Bolt	M5*10	4	
3	203524-1	Base		1	(3800)
4	203588	Hole plug	HP-25	5	
5	NH081300	Hex Nut	M8	10	
6	WS080000	Lock Washer	M8	10	
7	WF102025	Washer	M10*ψ20	10	
8	SI080700	Counter Sunk Screw	M8*35	10	
9	203356	Ring		10	
10	BB620202	Ball Bearing	6202ZZ	10	
11	203586	Eccentric shaft		10	
12	203703	Block		2	
13	203555	Fixed Base		1	
14	WS080000	Lock Washer	M8	2	
15	SH080400	Hex Head Bolt	M8*20	2	
16	NH121900	Hex Nut	M12	1	
17	NH061000	Hex Nut	M6	1	
18	SS060500	Set Screw	M6*25	1	
19	PS061200	Spring pin	ψ6*12	1	
20	203568	Block		1	
21	KD060614	Key	6*6*14L	1	
22	203566	Shaft		1	
23	203583	Plate		1	
24	203567	Ring		1	
25	SI050200	Counter Sunk Screw	M5*10	1	
26	203569-1	Lever		1	(3800)
27	203576	Base		1	
28	203578	Spring		1	
29	SR080800	Cap Screw	M8*40	1	
30	203577	Ring		1	
31	203557	Block		2	
32	PS052000	Spring pin	ψ5*20	1	
33	203571	Spring		1	
34	PP102000	Pin	ψ10*20	1	
35	SJ069300	Screw	M6*12	1	
36	203574	Block		1	
37	203573	Block		1	
38	SR080400	Cap Screw	M8*20	2	
39	203572	Fixed Block		1	
40	203423	Hander		1	T3

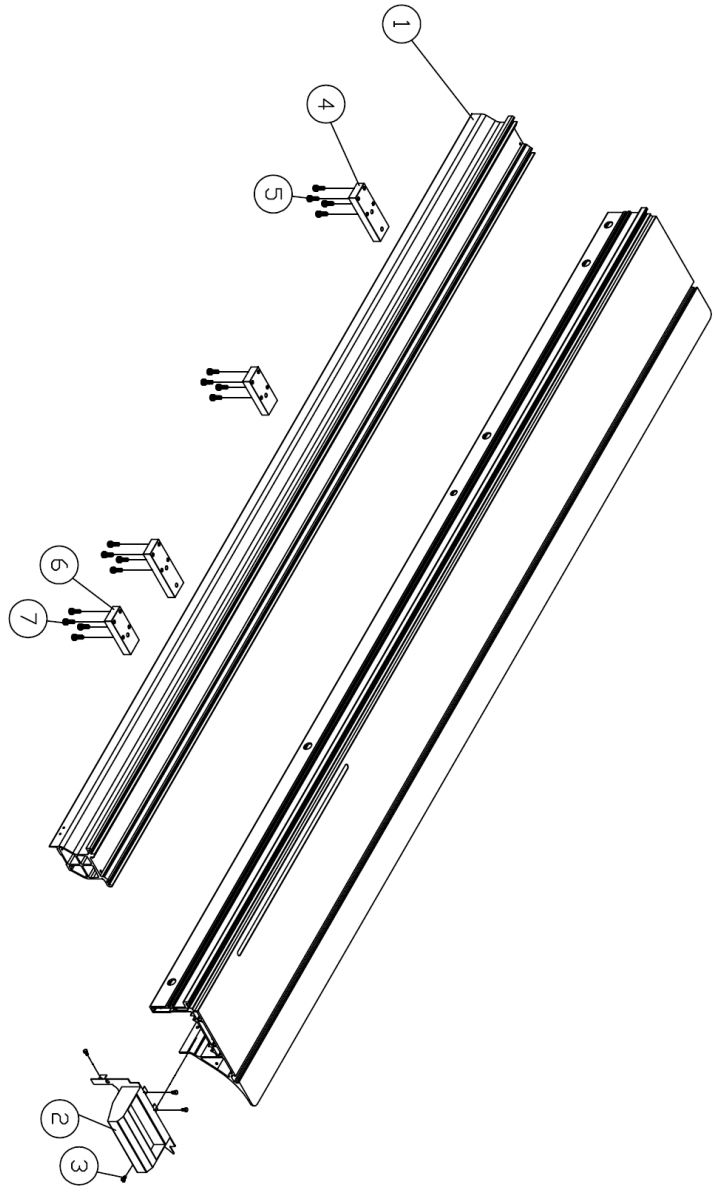
ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
41	SH050200	Hex Head Bolt	M5*10	4	
42	203527-1	Cylinder		2	(3800)
43	203526-1	Cylinder		1	(3800)
44	203702	Ring		1	



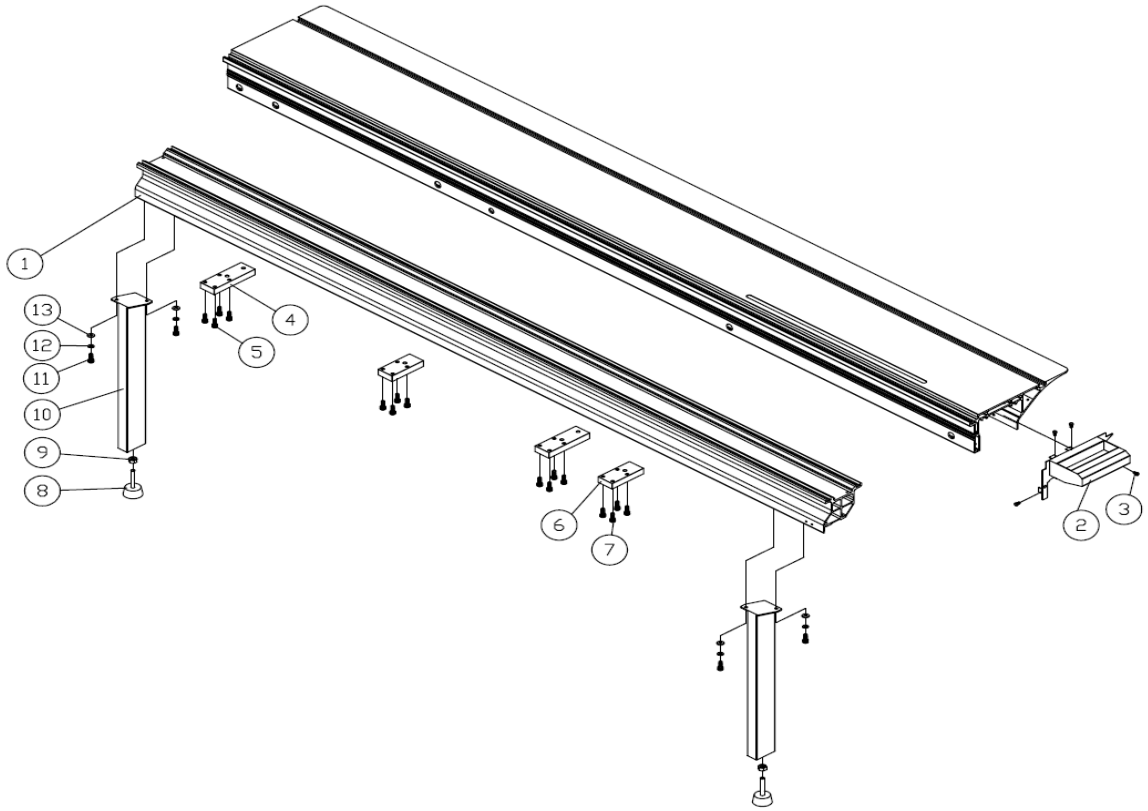
ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
1	203929	Rack		1	
2	NH121900	Hex Nut	M12	2	
3	SI109300	Counter Sunk Screw	M10×12	4	
4	203946	Nut		4	
5	BB620202	Ball Bearing	6202ZZ	4	
6	203528	Roller		2	
7	203529	Shaft		2	
8	203530	Roller		2	
9	203576	Base		1	
10	203578	Spring		1	
11	SR080800	Cap Screw	M8*40	1	
12	203577	Ring		1	
13	203557	Block		1	
14	SP069400	Screw	M6×16	4	
15	203943	Comb		4	
16	NH061000	Hex Nut	M6	4	
17	PS082000	Pin	ψ8×20	1	
18	SS050100	Screw	M5×5	1	
19	203945	Knob	M8	1	
20	203940	Shaft		1	
21	203941	Ring		1	
22	203944	Spring		1	
23	205054	Screw		1	

ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
24	203936	Plate		1	
25	PS062800	Pin	ψ6×28	1	
26	203937	Lump		1	
27	203938	Axle		1	
28	RS120000	Retaining Ring	S12	2	

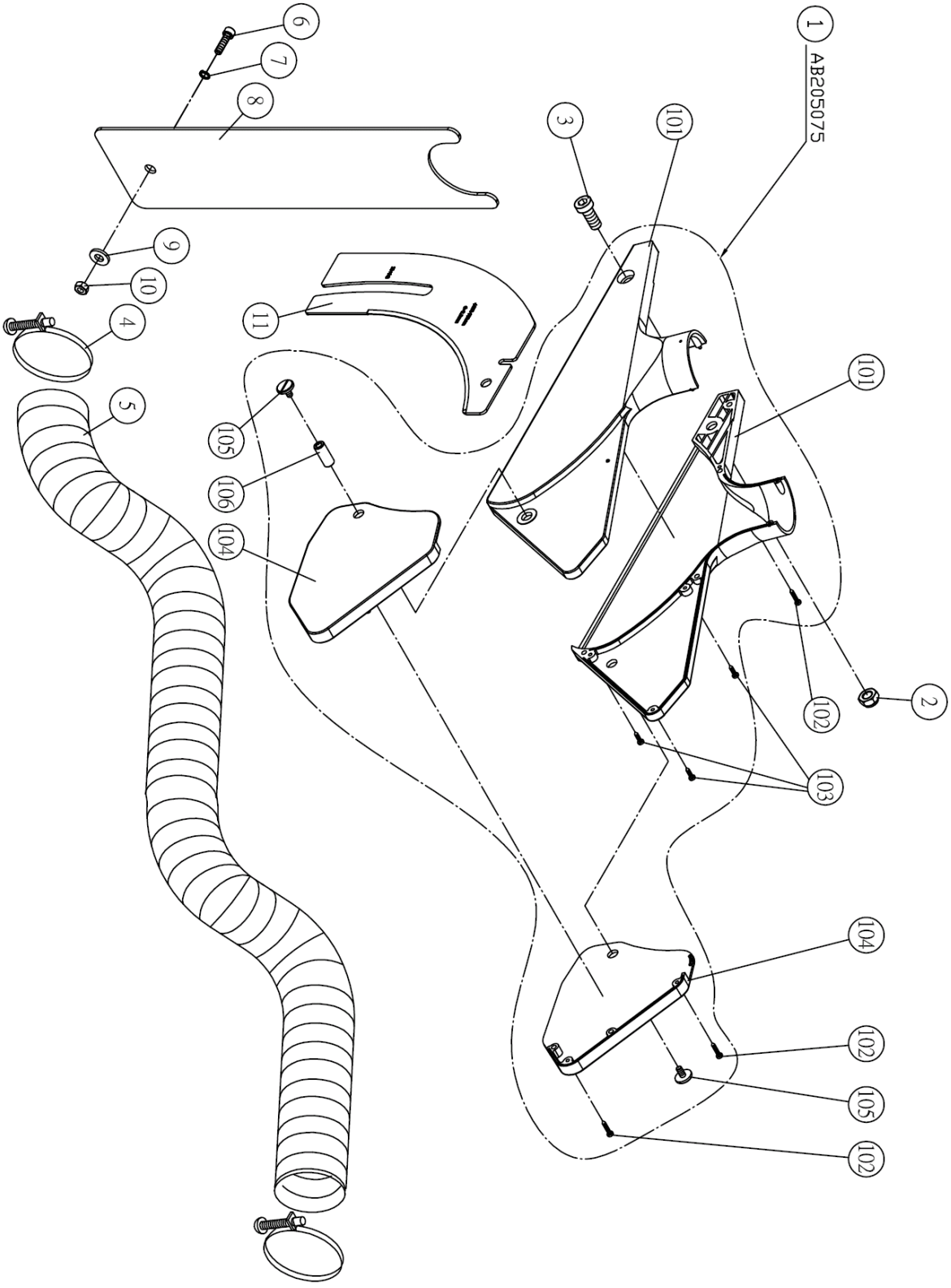
2395160D
2395250D
2395320D



ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
1	2395160D	Table	395x1600mm	1	Optional
	2395250D	Table	395x2500mm	1	Optional
	2395320D	Table	395x3200mm	1	
2	203423	Hander		1	T3
3	SH050200	Hex Head Bolt	M5*10	4	
4	203520	Fixed Block		2	
5	SR080500	Cap Screw	M8*25	8	
6	205246	Fixed Block		2	
7	SR080500	Cap Screw	M8*25	8	



ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
1	2395380D	Table	395x3800mm	1	
2	203423	Hander		1	T3
3	SH050200	Hex Head Bolt	M5*10	4	
4	203520	Fixed Block		2	
5	SR080500	Cap Screw	M8*25	8	
6	205246	Fixed Block		1	
7	SR080500	Cap Screw	M8*25	4	
8	201544	Foot Pad		2	
9	NH121900	Hex Nut	M12	2	
10	205394	Support Tube	For P type	2	Optional
	207645	Support Tube	For D type	2	Optional
	207647	Support Tube		2	Optional
11	SR080400	Cap Screw	M8*20	4	
12	WS080000	Lock Washer	M8	4	
13	WF081818	Washer	M8*ψ18	4	


1
AB205075
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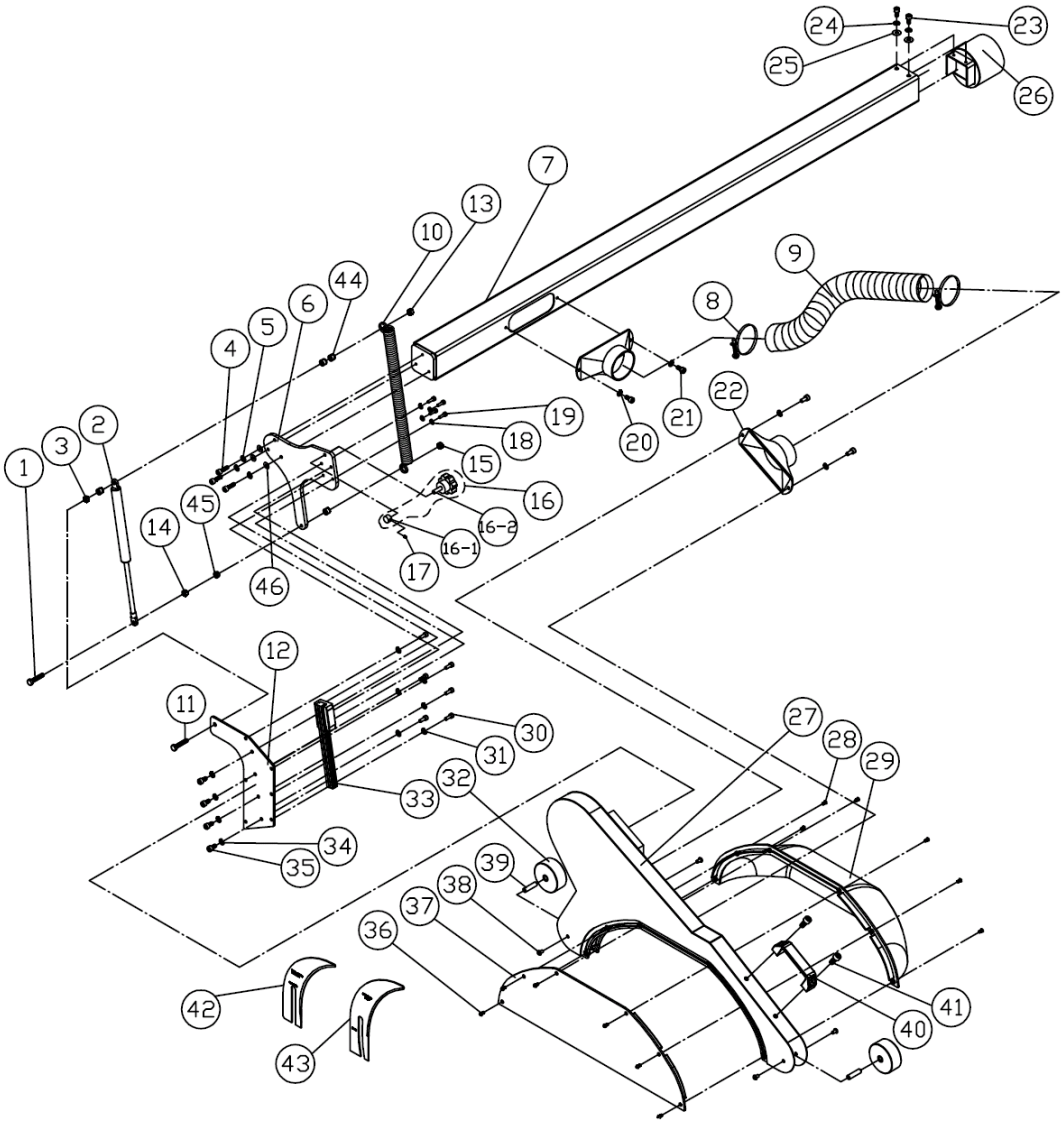
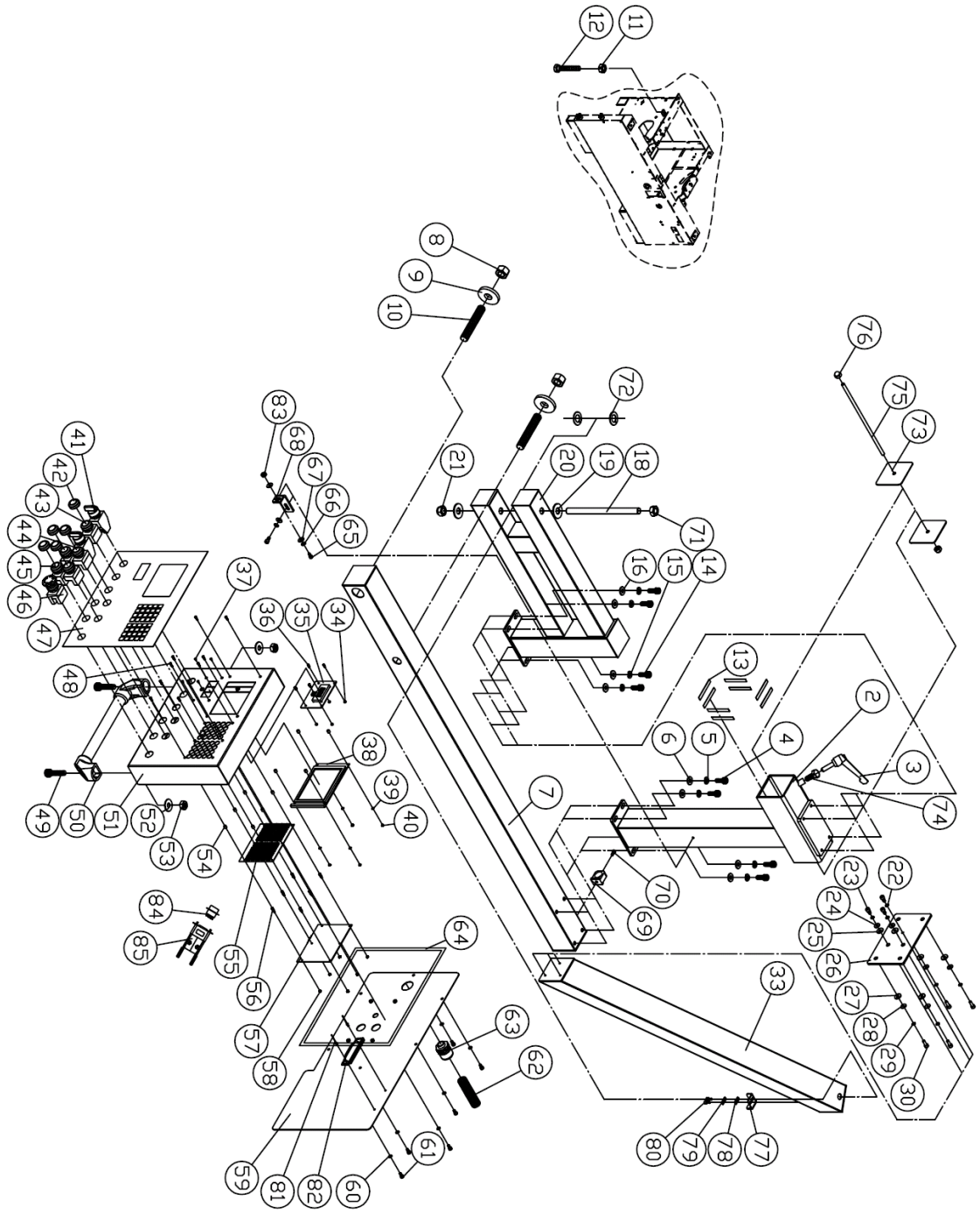
ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
1	AB205075	Hood Assembly		1	A
101	205075	Hood		1	
102	ST029404	Screw	M3×16	3	
103	ST029304	Screw	M3×12	3	
104	205076	Hood		1	
105	203110	Screw	M5×10	2	
106	205124	Shaft		1	
2	NL101700	Lock Nut	M10	1	
3	205162	Cap Screw	M10×25	1	
4	200535	Hose Clamp	2-1/2"	2	S
5	200536	Hose	φ60x3000	1	S
6	SR100400	Cap Screw	M10x20	1	
7	WS100000	Lock Washer	M10	1	
8	200965	Hose Support Plate		1	
9	WF102025	Washer	M10x20	1	
10	NH101700	Hex Nut	M10	1	
11	205067	Plate	ψ300~350	1	



ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
1	SH080900	Hex Head Bolt	M8*45	1	
2	205307	Gas Expansion Cylinder		1	
3	NH081300	Hex Nut	M8	1	
4	SR060400	Cap Screw	M6*20	3	H
5	WS060000	Lock Washer	M6	3	H
6	205306	Fixed Plate		1	GK
7	206389	Arm		1	R
8	204158	Hose Clamp	3-1/4"	2	
9	HS330004	Hose	ψ3"x42cm	1	
10	207797	Spring		1	
11	SH081200	Hex Head Bolt	M8*60	1	
12	205314	Fixed Plate		1	GK
13	NL081300	Lock Nut	M8	1	
14	NH081300	Hex Nut	M8	1	

ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
15	NL081300	Lock Nut	M8	1	
16	AB205304	Knob Screw SET		1	A
16-1	205304	Locating Block		1	
16-2	200937	Knob Screw	M8*1.25p*25L	1	
17	SS059100	Setscrew	M5*6	1	
18	WS050000	Lock Washer	M5	4	
19	SR059400	Cap Screw	M5*16	4	
20	WS060000	Lock Washer	M6	4	H
21	SJ069300	Cap Screw	M6*12	4	H
22	204061	Dust Port		2	
23	SJ069300	Cap Screw	M6*12	2	
24	WS060000	Lock Washer	M6	2	
25	WF061920	Washer	M6*ψ19	2	
26	206390	Dust Port		1	R
27	206387	Guard		1	GK
28	SP049200	Pan Head Screw	M4*8	6	H
29	205355	Protection Hood		1	
30	SR069300	Cap Screw	M6*12	6	
31	WS060000	Lock Washer	M6	6	
32	203355	Roller		2	
33	203216	Liner Guide		1	
34	WS060000	Lock Washer	M6	4	
35	SR069300	Cap Screw	M6*12	4	
36	SP049200	Pan Head Screw	M4*8	6	
37	205356	Protection Hood		2	
38	SJ069200	Button Head Screw	M6*8	4	
39	203354	Shaft		2	
40	201624	Handle		1	
41	SR089400	Cap Screw	M8*16	2	
42	205073	Plate	φ300~350	1	
43	205032	Plate	φ350~400	1	Optional
44	200962	Bushing		4	
45	200964	Bushing		1	
46	WF061920	Washer	M6*ψ19	3	H
47	SJ069200	Button Head Screw	M6*8	4	
48	203354	Shaft		2	
49	201624	Handle		1	
50	SR089400	Cap Screw	M8*16	2	
51	205073	Plate	φ300~350	1	
52	205032	Plate	φ350~400	1	Optional
53	NH121900	Hex Nut	M12	1	
54	SH121400	Hex Head Bolt	M12X70	1	

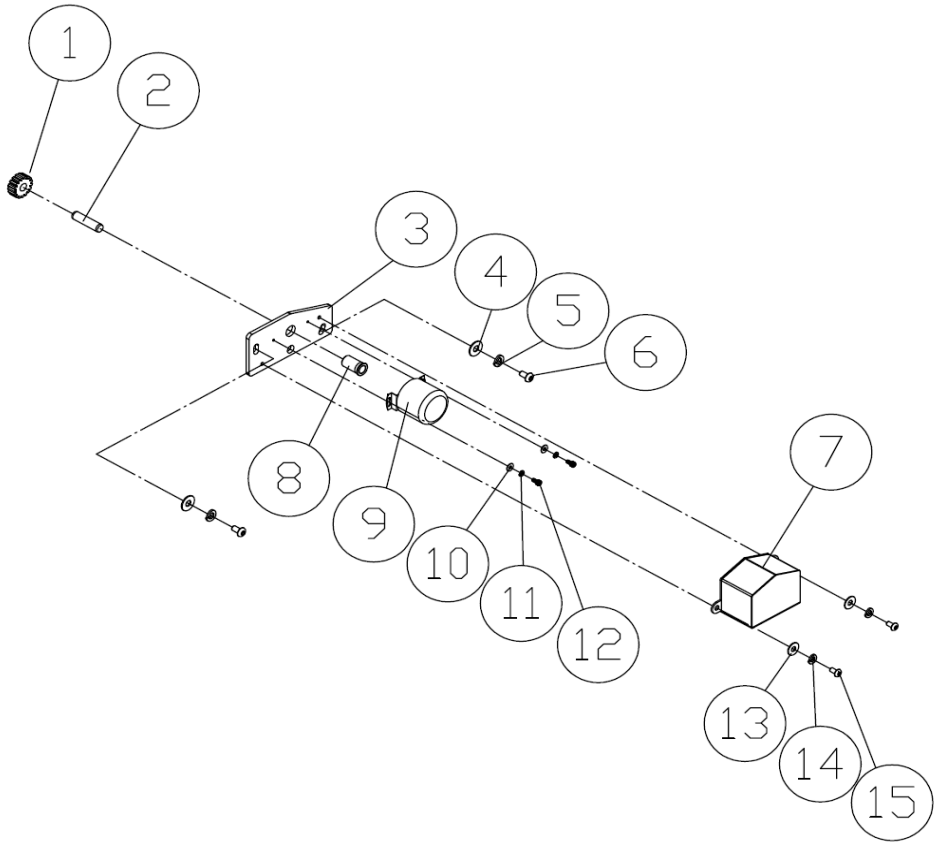
ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
55	201039	Pad		8	
56	WF061920	Washer	M6*ψ19	3	
57	207797	Spring		1	
58	200962	Bushing		4	
59	200964	Bushing		1	



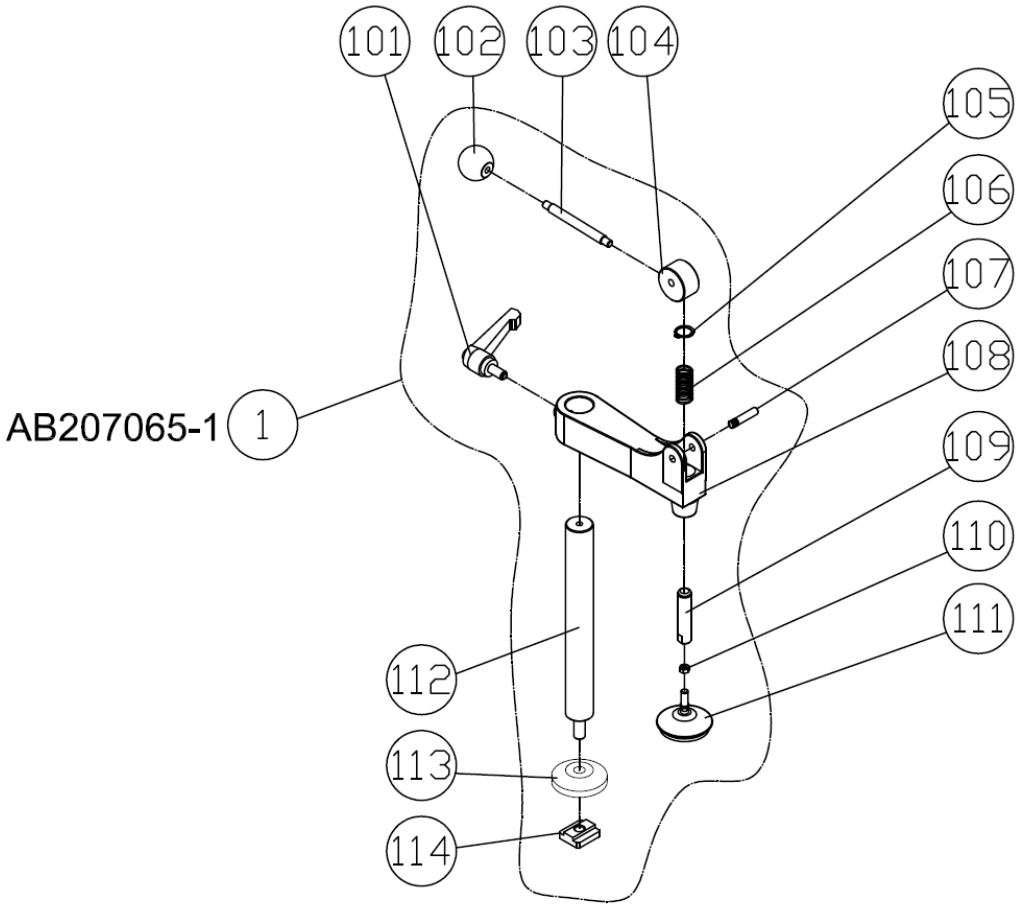
ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
2	207770	Fixed Bracket		1	R
3	201109	Fasten Handle	M10x35	1	H
4	SR080500	Cap Screw	M8x25	4	H
5	WS080000	Lock Washer	M8	4	H
6	WF081818	Washer	M8x18	4	H

ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
7	206391	Fixed Bracket		1	R
8	NH203000	Hex Nut	M20	2	
9	203338	Washer	ψ22*ψ60*t8	2	
10	205116	Screw	M20*130	2	
11	NH121900	Hex Nut	M12	1	
12	SH121400	Hex Head Bolt	M12X70	1	
13	201039	Pad		8	
14	SR08040	Cap Screw	M8x20	4	
15	WS080000	Lock Washer	M8	4	
16	WF081818	Washer	M8x18	4	
18	207773	Bolt		1	
19	WF164030	Washer	M16x40	2	
20	207769	Fixed Bracket		1	R
21	NL162400	Lock Nut	M16	1	
22	WS050000	Lock Washer	M5	3	
23	SR059400	Cap Screw	M5X16	3	
24	WF051210	Washer	M5×ψ12	2	
25	WF061920	Washer	M6×ψ19	2	
26	207772	Fixed Plate		1	R
27	WF061920	Washer	M6×ψ19	4	
28	WF051210	Washer	M5×ψ12	4	
29	WS050000	Lock Washer	M5	4	
30	SR059400	Cap Screw	M5X16	4	
33	207771	Fixed Bracket		1	R
34	NH030600	Hex Nut	M3	4	
35	207653	IC Board		1	
36	201736	Rod		4	
37	SI039100	Counter Sunk Screw	M3*6	4	
38	203447	Liquid Crystal Display		1	
39	203442	Washer	PGWS-2T	4	
40	NH030500	Nut	M3	4	
41	205240	Switch Button Cut Out		2	
42	994855A	Dust Cove	R2 PRCF	5	
43	994993	Switch Button	R2 PNF-1A-W	1	
44	994855	Switch Button-ON	R2 PNF-1A-G	2	
45	994856	Switch Button-OFF	R2 PNF-1B-R	2	
46	994819	Emergency Stop Button	R2 PNR4-3B-R	1	
47	LM207022	Face plate Label		1	
48	SI039300	Counter Sunk Screw	M3×12	10	
49	SR100900	Cap Screw	M10*45	2	
50	205557	Handle	MS-737-1-A-330	1	
51	207757	Case		1	R

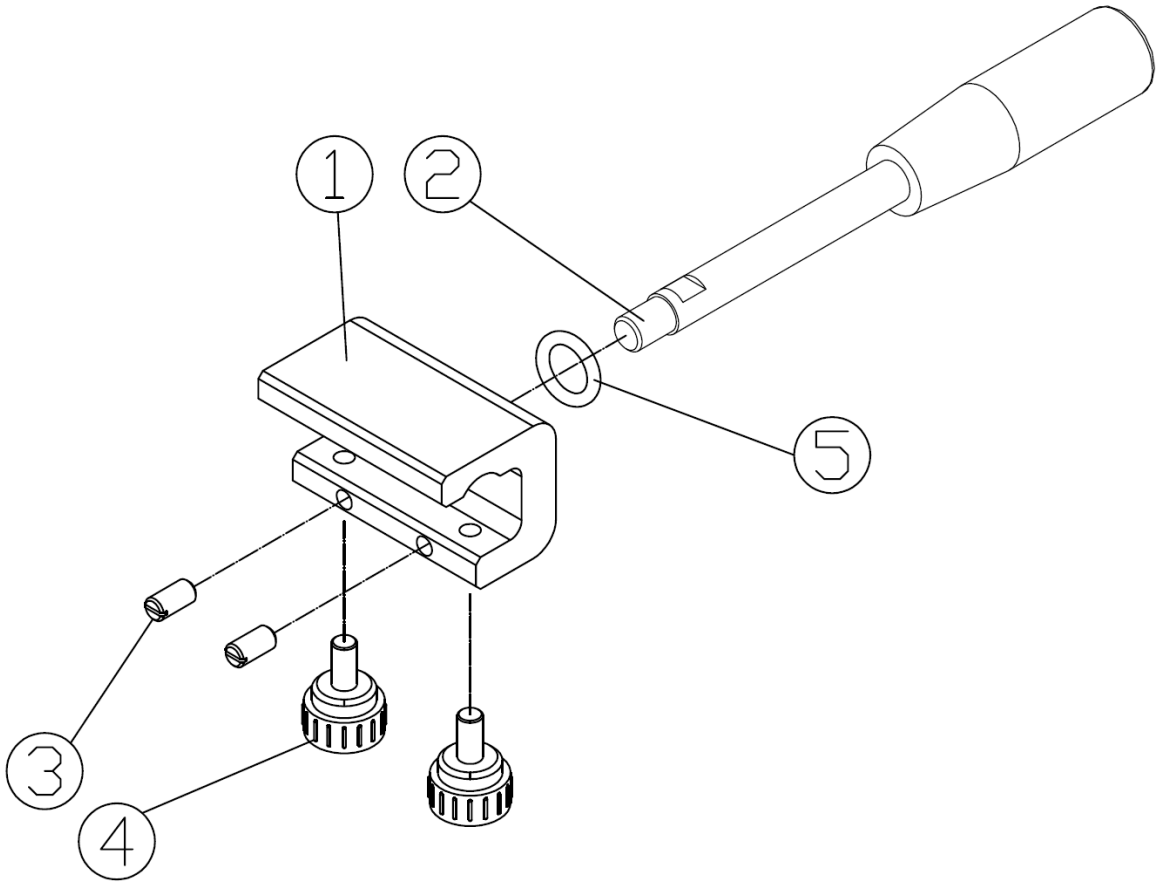
ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
52	WF102520	Washer	M10×ψ25	2	
53	NH101700	Hex Nut	M10	2	
54	203445	Column	PG-SS406A	10	
55	203448	Circuit Card		1	
56	203446	Copper Pillar	CU-A10	6	
57	203449	Circuit Card		1	
58	NH030500	Nut	M3	6	
59	207758	Plate		1	R
60	WS050000	Lock Washer	M5	6	
61	SR050200	Cap Screw	M5×10	6	
62	204196	Plastic Corrugated Tubing	NFE-08B | NGN-12B	0	
63	998808	Strain Relief	N-MGQ32-34B	2	
64	150527	Pad	2x300x7.5(M/M)	5	
65	SR060400	Cap Screw	M6*20	2	
66	WS060000	Lock Washer	M6	2	
67	WF061620	Washer	M6×ψ16	3	
68	207776	Fixed Plate		1	R
69	998807	Holder	N-TH-34B	7	
70	SR060200	Cap Screw	M6*10	7	
71	NH162400	Hex Nut	M16	1	
72	994214	Thrust Bearing	LFW-2015	2	
73	207823	Cover		2	
74	SH100500	Hex Head Bolt	M10X25	1	
75	207832	Screw	M8*270	1	
76	207235	Nut	M8	2	
77	207875	Fixed Plate		1	
78	WF051210	Washer	M5×ψ12	2	
79	WS050000	Lock Washer	M5	2	
80	SR050200	Cap Screw	M5X10	2	
81	BR000041	Rivet	ψ3.2×6	2	
82	203917	Binder		1	
83	NH061000	Hex Nut	M6	1	
84	203450-03	Joint	D09P	1	
85	205147	Joint	D09K-L	1	



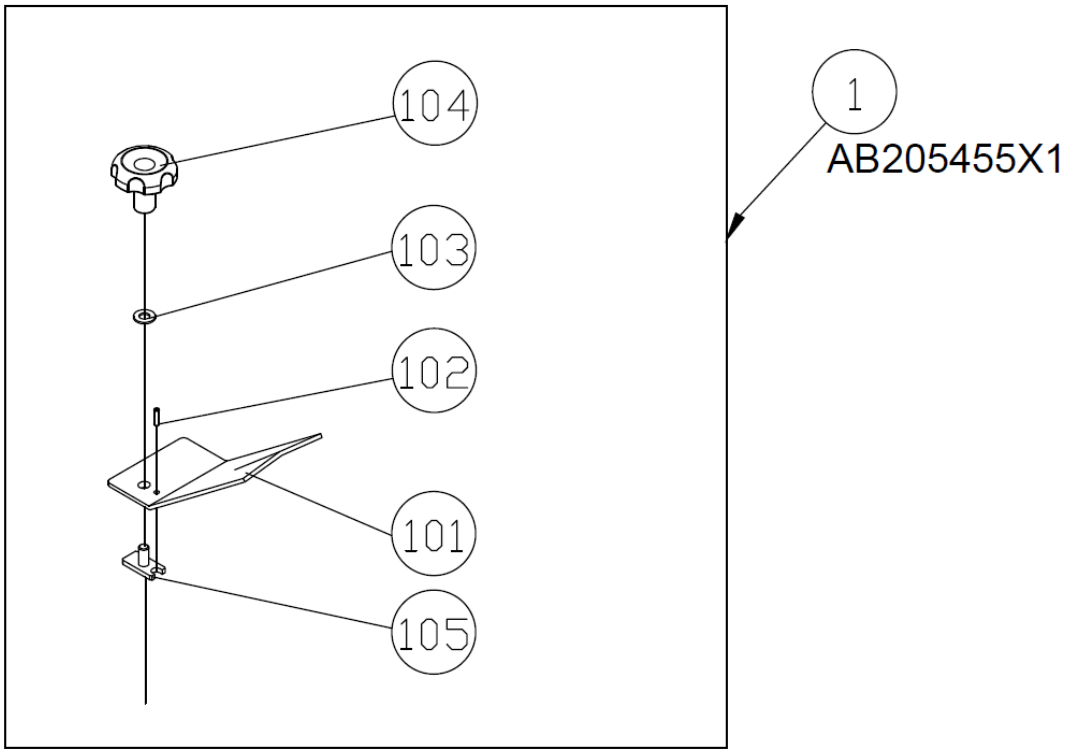
ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
1	203017	Gear Wheel		1	
2	PP105000	Pin	ψ10*50	1	
3	207658	Encoder Fixed Plate		1	
4	WF061620	Washer	M6*ψ16	2	
5	WS060000	Lock Washer	M6	2	
6	SJ069300	Button Head Screw	M6*12	2	
7	207655	Cover		1	
8	207747	Encoder Shaft Ring		1	
9	203154	Encoder		1	
10	WF030605	Washer	M3*ψ6	2	
11	WS030000	Lock Washer	M3	2	
12	SR039100	Cap Screw	M3*6	2	
13	WF051210	Washer	M5*ψ12	2	
14	WS050000	Lock Washer	M5	2	
15	SJ059200	Button Head Screw	M5*8	2	



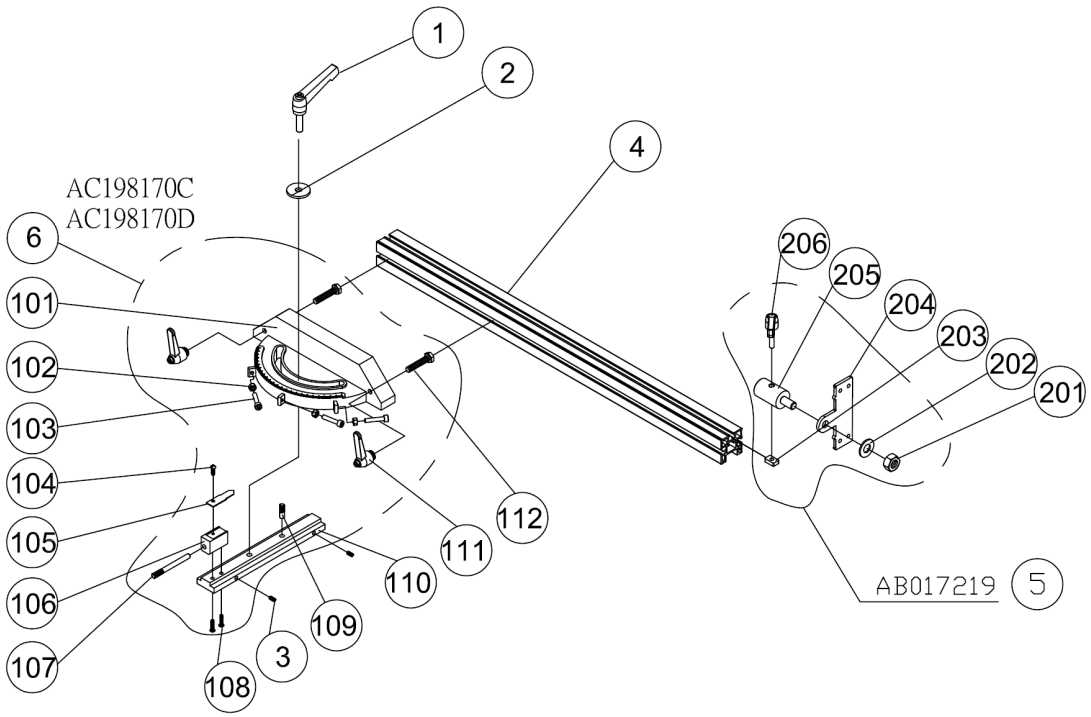
ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
1	AB207065-1	Down Press ASM		1	
101	207143	Adjust Handle		1	
102	100271	Ball Knob	M8×P1.25	1	
103	207070	Handle Bar		1	
104	207067	Cam		1	
105	RS140000	Ext. Retaining Ring	S14	1	
106	207069	Spring		1	
107	207145	Pin		1	
108	207065	Down Press		1	
109	207068	Shaft		1	
110	NH602300	Hex Nut	5/16	1	
111	200807	Large Washer		1	
112	205253	Shaft		1	
113	200809	Washer		1	
114	201855	T-Nut	For B sliding table	1	Optional
	205830	Block	For D sliding table	1	Optional



ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
1	205264	Block		1	
2	200939	Handle		1	
3	203238	Set Screw	M8×16	2	For D type
	SS080500	Set Screw	M8x25	2	For C type
4	203720	Knob	M8×16	2	
5	992492	PLASTIC WASHER	φ12xφ30 t=3	1	



ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
1	AB205455X1	Edge Shoe Plate Assembl		1	
101	205455	Edge Shoe Plate		1	X1
102	PS051800	Spring Pin	φ5xφ18	1	
103	WF102025	Washer	M10x25	1	
104	203718	Knob	M10	1	
105	201829	T-Nut	M10x1.5p	1	



ITEM	PART NO	PARTS NAME	SIZE	Q`TY	NOTE
1	200814	Fasten Handle		1	
2	WF083030	Flat Washer	M8×ψ30	1	
3	201632	Spring plungers with ball	M4×9	2	
4	017210	Square Fence		1	
5	AB017219	Stop Plate Assembly		1	A
201	NL101700	Lock Nut	M10	1	
202	WF102025	Flat Washer	M10×ψ20	1	
203	NS061000	Square Nut	M6	1	
204	017219	Stop Plate		1	
205	200343	Lock Shaft		1	
206	200415	Adjust Handle	M6×30	1	
6	AC198170C	Miter Gauge Assembly	FOR C TYPE	1	Optional
	AC198170D	Miter Gauge Assembly	FOR D TYPE	1	Optional
101	198170	Miter Gauge Body		1	
102	NH050800	Hex Nut	M5	3	
103	SR050500	Cap Screw	M5×25	3	
104	SP049300	Pan Head Bolt	M4×12	1	
105	201366	Pointer		1	
106	201365	Fixed Block		1	
107	201367	Stop Bar		1	
108	SP049400	Pan Head Bolt	M4×16	2	
109	198174	Shaft		1	
110	205721	Fixed Base		1	D
	205829	Fixed Base		1	D
111	017003	Adjust Handle		2	
112	SH060600	Hex Head Bolt	M6×30	2	

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Normal wear and tear; misuse, abuse and neglect are excluded and the machine should not have been modified in any way. Please do not attempt to service the product without first contacting us; we are happy to guide you but failure to do so may invalidate the guarantee.

The Guarantee is transferable from owner to owner in the first three years but you must have original proof of purchase. Should we need to replace a machine in the first three years the guarantee will still continue to be effective from the original purchase date.

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